

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Van Hosen

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	150 F.	140 F. or Greater
% Chlorine	< 0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	0.435	2 ppm
CHROMIUM (total)	0.044	10 ppm
LEAD	39.4	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

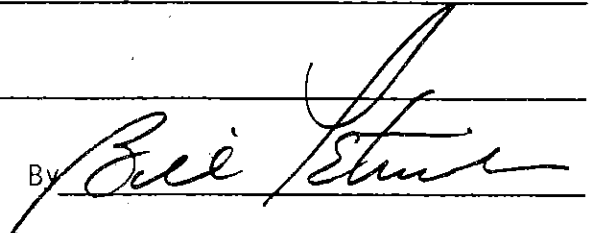
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Independent Sampling and Services:

By



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Tony

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	183 F.	140 F. or Greater
% Chlorine	<0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	1.23	2 ppm
CHROMIUM (total)	1.09	10 ppm
LEAD	*129	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

Lead concentration is dropping but  
still exceeds specification.

Independent Sampling and Services:

By

*Bui Ester*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Interstate Pollution

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	158 F.	140 F. or Greater
% Chlorine	< 0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	0.590	2 ppm
CHROMIUM (total)	6.92	10 ppm
LEAD	* 126	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

*Lead must be down - blended to  
achieve compliance.*

Independent Sampling and Services:

By *Bee Stern*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R & S

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	165 F.	140 F. or Greater
% Chlorine	< 0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	1.46	2 ppm
CHROMIUM (total)	0.813	10 ppm
LEAD	173*	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Lead content must be down-blended  
to achieve compliance.

Independent Sampling and Services:

By

B. J. Etnier

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: CBO Greenfield

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	180 F.	140 F. or Greater
% Chlorine	< 0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	0.700	2 ppm
CHROMIUM (total)	0.227	10 ppm
LEAD	57.8	100 ppm

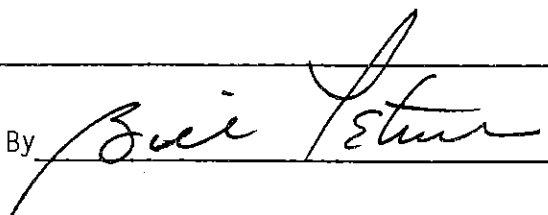
\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: E & L

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	150 F.	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	1.15	2 ppm
CHROMIUM (total)	0.515	10 ppm
LEAD	*165	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Lead is still high - and must  
be down-blended.

Independent Sampling and Services:

By

Bill Stone

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (T 2) 798-6383

MARCH 4, 1988

E. & L. Tank Cleaners  
P.O. Box 41  
Peotone Illinois 60468

ATTN: Ron Winkle

RE: Oil Results

SAMPLES SUBMITTED: MARCH 4, 1988

PARAMETER:	Southwest Oil	Ill. Recovery	Texoma
Flashpoint	200 F +	200 F +	200 F +
Arsenic	0.04 ppm	0.19 ppm	0.37 ppm
Cadmium	2.63 ppm	1.57 ppm	2.36 ppm
Chromium Total	0.02 ppm	0.02 ppm	1.39 ppm
Lead	193 ppm*	96.10ppm	137.0 ppm*
% Chloride	Less than 0.04	0.04	0.04

\* Exceeds recommended standard for lead.

The figures represent a continuity, and a much lower concentration of lead than had been previously experienced.

Respectfully,

  
Dan Petrich  
I.S.S.

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

MARCH 4, 1988

E. & L. Tank Cleaners  
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Arsenic	0.04 ppm	0.19 ppm	0.37 ppm
Cadmium	2.63 ppm	1.57 ppm	2.36 ppm
Chromium Total	0.02 ppm	0.02 ppm	1.39 ppm
Lead	193 ppm*	96.10ppm	137.0 pp
% Chloride      Less than	0.04	0.04	0.04

\* Exceeds recommended standard for lead.

The figures represent a continuity, and a much lower concentration of lead than had been previously experienced.

Respectfully,

  
Dan Petrich  
I.S.S.





CHICAGO LINE 312 / 821-4747  
PEOTONE LINE 312 / 258-6891  
P. O. BOX #41  
PEOTONE, IL 60456

## Quality Blended Fuel Oils

April 4, 1988

Mr. Eugene P. Theios, Manager  
Administrative Compliance Unit  
Compliance Section  
Division of Land Pollution Control  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield Illinois 62706

RE: 1970750002-Will County  
Pre-Enforcement Conference Letter  
March 23, 1988

Mr. Theios,

After receiving your Pre-Enforcement Letter of March 23, I was embarrassed for not having responded to the letter of February 8, 1988. The difficulty seems to have been our inability to locate the specific manifests outlined in the letter of February 8, 1988. (1652233 and 1261287). To date we have been unable to locate copies of either of those two manifests.

The additional manifest mentioned in your March 23, 1988 letter, (1261417) we have located, as well as the manifest relative to the Ford Motor Company of Indianapolis Indiana, (1652061).

At the suggestion of Mr. Bill Petrich, Bill Petrich, environmental services..., we will attempt to explain the confusion that was obviously generated by our lack of complete understanding of the regulations.

1. We had applied for a change in the name of our permit to Custom Blended Oils Inc. from E. & L. Tank Cleaners, because we generate fuel oil for heavy industry, and sell this product to industry as Custom Blended Oils Inc. We therefore wanted to operate under one corporate name.
2. As of April 4, 1988, our request for name change has not been ruled upon by the Illinois Environmental Protection Agency, Division of Land Pollution Control, and our phone call to Marla Layman indicated that the agency had until the 24th of April, (90 days) to make a decision on the name change.
3. Because of this, we contacted Mr. Bob Watson of the permit section, and were informed that if we sent down for supplemental permits, under the name Custom Blended Oils Inc. before the name change was approved, the applications would be rejected.
4. In 1987 permits were submitted to the agency for multi-stop service station used oil collection. The permits were made out on pink application forms. Many of the forms were not checked, resulting in additional information being added.

Multi-stop restricted to serv. stations.

Modified Operated Permit to ("other used oils").

application forms were available. We now have the green forms made out in the name of Custom Blended Oils Inc. and are awaiting the decision by the agency for the requested name change.

5. The use of the 000049 Stream Authorization Number by Ford Motor Company was not our doing. Their stream, (purchased oil) is taken to our facility in Greenfield Indiana, where it is agglomerated with other oils, purchased in Indiana. This oil is then brought to Peotone for final blending into useable fuel.

Our understanding is that the manifest requirement would then apply when we bring used oil (Illinois "special waste"), from Greenfield to Peotone, it would be under a supplemental permit issued to Custom Blended Oils Inc. and not Ford Motor Company?

6. The state of Indiana no longer has restrictions on the hauling of used crankcase oil, and indeed encourages the re-use of this oil in accordance with the federal mandate to "minimize" waste, and re-cycle and recover in every instance possible. On this basis, will the Illinois Environmental Protection Agency continue to insist on manifests for "purchased" oil, not "waste"?

Mr. Petrich indicated that when he spoke with you, that some "thirty to thirty-five" manifests were now improperly executed, and that each represents a violation of the statute. On this basis we have directed our personnel as follows:

1. All manifests made out as of April 4, 1988, will have the name of the permit holding company, E. & L. Tank Cleaners.
2. All manifests will have the Stream Authorization Number, issued by the I.E.P.A. and the Illinois, Indiana, Wisconsin, Kentucky, Minnesota, Ohio, identification number, issued by those agencies, state and/or federal.
3. For each and every stream received by Custom Blended Oils Inc. a Stream Authorization number must be applied for on a green application sheet supplied by the I.E.P.A. with all of the information requested given.
4. In the case of "multi-stop" service station accumulations, each Licensed Waste Hauler who brings oil to Custom Blended Oils Inc. will have obtained an Illinois Generators Number on behalf of their multiple stops, and will supply to Custom Blended Oils Inc. samples of Oil (special waste), so that appropriate analyses may be performed prior to submission for Stream Authorization Number.
5. Samples of each days "receipts" of oil will be kept, and analyzed in accordance with Illinois Environmental Protection Agency Title 35, Subpart E: Used Oil Burned for Energy Recovery 726.143, 726.140.

We apologize for the confusion that was generated as a result of our not implementing policies and procedures as relates to manifest generation, and administration. Please allow that Custom Blended Oils Inc. (E. & L. Tank Cleaners) will endeavor to conform with each and every aspect of the regulation in the future, and that our willingness to cooperate with the agency is hereby reaffirmed.

Respectfully,

*Ernest Winkle*  
Ernest Winkle  
President

for supplementary permit it is changed from a different facility.

Manifests from Ford should say = <sup>generator</sup> CBO Greenfield to CBO Peotone, Ill. Our Generator # goes in ~~Gen~~ TOP Genera #. (where Ford's Gen. # was).

WI Manifest's should read - <sup>CBO - WI. (multi-stop)</sup> ~~Gerry Renter - WI.~~ to CBO Peotone (not Minit Lubes).

Proper ID for Used Oil - Used Oil a Crude oil (Non-Haz.) <sup>(ORM other req. met)</sup>

Used Oil (Non Haz ORME NON HAZ) - in DOT Part of Manifest.  
(To satisfy Dep. of Trans.)

Supplementary permit # for Ind & WI until we get Generic #.

MUST have Authorization # (ALL IL. MANIFESTS).

Cindy Nelson - Hauling & P.U. w/ TRUCKS

Analysis WITHIN a year (green sheets)

1,000 every 3 mos. - cannot be part of a multi-stop.

Generic is on composition of oil!

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 20, 1988

SAMPLE SUBMITTED: April 12, 1988

RESULTS REPORTED: April 20, 1988

Dukes # 101

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 140 F.	140 F. or Greater
% Chlorine	Less than 0.05%	4,000 ppm
ARSENIC	Less than 0.40 ppm	5 ppm
CADMIUM	1.60 ppm	2 ppm
CHROMIUM (total)	2.36 ppm	10 ppm
LEAD	122.0 ppm *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil should be down-blended with virgin fuel, or recovered oils

containing less lead concentration.

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 20, 1988

SAMPLE SUBMITTED: April 12, 1988

RESULTS REPORTED: April 20, 1988

Greenfield # 102

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 140 F.	140 F. or Greater
% Chlorine	Less than 0.05%	4,000 ppm
ARSENIC	Less than 0.40 ppm	5 ppm
CADMIUM	2.00 ppm	2 ppm
CHROMIUM (total)	3.49 ppm	10 ppm
LEAD	130 ppm*	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

Although the lead concentration continues to drop in used crankcase oil,  
it still exceeds federal E.P.A. guidelines. Suggest down-blending with oils  
containing -0- lead.

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-0

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

Ford # 111

PARAMETER	RESULT	S.
Flash Point	Greater than 200° F	140 F. or Greater
% Chlorine	3816 ppm	4,000 ppm
ARSENIC	Less than .04 ppm	5 ppm
CADMIUM	0.895 ppm	2 ppm
CHROMIUM (total)	1.15 ppm	10 ppm
LEAD	6.42 ppm	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

## COMMENTS:

This oil conforms to the criteria established by the federal E.P.A. for

"used oil".

Independent Sampling and Services:

By Bill Stur

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

Ill. Recovery, # 107

PARAMETER	RESULT	SPEC
Flash Point	135 ° F. *	140 F. or Greater
% Chlorine	2632 ppm	4,000 ppm
ARSENIC	Less than 0.4 ppm	5 ppm
CADMIUM	2.52 ppm *	2 ppm
CHROMIUM (total)	3.84 ppm	10 ppm
LEAD	124.0 ppm *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil exceeds federal standards in Flash Point, Cadmium, and Lead, and sh

be blended with virgin oil to prepare material for customer use.

Independent Sampling and Services:

By Bill Stine



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

Dukes # 108

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	786 ppm	4,000 ppm
ARSENIC	Less than .04 ppm	5 ppm
CADMIUM	1.67 ppm	2 ppm
CHROMIUM (total)	2.67 ppm	10 ppm
LEAD	148.0 ppm*	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This stream exceeds lead concentration as determined by federal E.P.A. and should  
therefore be blended with non-lead bearing oil to reach conformity.

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

R. & S. # 103

PARAMETER	RESULT	SPEC.
Flash Point	150° F.	140 F. or Greater
% Chlorine	2256 ppm	4,000 ppm
ARSENIC	Less than .04 ppm	5 ppm
CADMIUM	1.40 ppm	2 ppm
CHROMIUM (total)	1.84 ppm	10 ppm
LEAD	91.1 ppm	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This stream conforms with federal E.P.A. guide lines for "used oil".

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

CBO # 104

PARAMETER	RESULT	SPEC.
Flash Point	170 ° F	140 F. or Greater
% Chlorine	407 ppm	4,000 ppm
ARSENIC	Less than .04 ppm	5 ppm
CADMIUM	1.10 ppm	2 ppm
CHROMIUM (total)	1.22 ppm	10 ppm
LEAD	30.3 ppm	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil stream conforms to the federal guidelines for used oil, and can be  
blended with other conforming streams.

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

House Stock, # 109

PARAMETER	RESULT	SPEC.
Flash Point	N.E.	140 F. or Greater
% Chlorine	848 ppm	4,000 ppm
ARSENIC	Less than 0.4 ppm	5 ppm
CADMIUM	1.95 ppm	2 ppm
CHROMIUM (total)	3.11 ppm	10 ppm
LEAD	134.D *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

The lead concentration in the house stock exceeds federal guidelines, and this material should be blended with virgin oil to make up customers product

Independent Sampling and Services:

By Bill Etn

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE May 17, 1988

SAMPLE SUBMITTED: May 6, 1988

RESULTS REPORTED: May 17, 1988

CBO sample #2 ISS 204

PARAMETER	RESULT	SPEC.
Flash Point	180° F	140 F. or Greater
% Chlorine	1,567 ppm	4,000 ppm
ARSENIC		5 ppm
CADMIUM		2 ppm
CHROMIUM (total)		10 ppm
LEAD		100 ppm
ASH	0.87	0.76-0.81

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil sample reflects "typical" analysis for blended fuel produced from

"used oil" containing "crankcase" oil, along with other recovered oils.

The sample was analysed in accordance with accepted P.P.I., A.S.T.M., and E.P.A.  
protocols.

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE May 17, 1988

SAMPLE SUBMITTED: May 6, 1988

RESULTS REPORTED: May 17, 1988

/CBO Sample #1, ISS # 203

PARAMETER	RESULT	SPEC.
Flash Point	155 ° F	140 F. or Greater
% Chlorine	1,235 ppm	4,000 ppm
ARSENIC		5 ppm
CADMIUM		2 ppm
CHROMIUM (total)		10 ppm
LEAD		100 ppm
ASH	0.67 %	SAE: 0.76 to 0.81

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

This sample reflects the accepted properties of "used oil" from a crankcase source, and is not to be construed as "different" than other crankcase blended fuels produced from "used oil" sources.

COMMENTS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Independent Sampling and Services:

By 



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

NCE 1908

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.D. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

May 27, 1988

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us -----

New Blend  
25-35

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 5/20/88

Analysis report no. 71-56638

Ash Content ..... 0.89 % By Weight

Flash Point, Pensky-Martens ..... 182°F

Gravity At:

Specific at 60/60°F ..... 0.9297

Lb per gal. at 60°F ..... 7.742

°API ..... 20.7

Heating Value:

Btu/lb. .... 18,024

Btu/gal. at 60°F ..... 139,542

Sulfur Content ..... 0.72 % By Weight

Viscosity At: SUSAT 100-0 7.7

122°F Syabolt Furol ..... 29.6 Seconds

122°F Kinematic ..... 62.7 Centistokes

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



Charter Member

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE June 21, 1988

SAMPLE SUBMITTED: May 25, 1988

RESULTS REPORTED: June 21, 1988

Southwest Waste Oil

PARAMETER	RESULT	SPEC.
Flash Point	165 F.	140 F. or Greater
% Chlorine	0.15	4,000 ppm
ARSENIC	0.001	5 ppm
CADMIUM	0.79	2 ppm
CHROMIUM (total)	2.93	10 ppm
LEAD	98.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

This oil meets the required specifications for "used oil".

Independent Sampling and Services:

By 



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE June 21, 1988

SAMPLE SUBMITTED: May 25, 1988

RESULTS REPORTED: June 21, 1988

Daves Waste Oil

PARAMETER	RESULT	SPEC.
Flash Point	120 F. *	140 F. or Greater
% Chlorine	0.15	4,000 ppm
ARSENIC	0.001	5 ppm
CADMIUM	1.38	2 ppm
CHROMIUM (total)	0.68	10 ppm
LEAD	135.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

The flash point is below acceptable limits, and this oil would not qualify as used oil under current definitions of used oil. Suggest monitoring this stream and instructing the supplier that his product does not meet federal or state requirements for "used oil".

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE June 21, 1988

SAMPLE SUBMITTED: may 25, 1988

RESULTS REPORTED: June 21, 1988

Berreth Oil.

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	0.20	4,000 ppm
ARSENIC	0.001	5 ppm
CADMIUM	0.210	2 ppm
CHROMIUM (total)	10.13 *	10 ppm
LEAD	44.7	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil shows an elevated level of chromium, and should be re-checked to

ascertain if this material is intrinsic to crankcase oil.

Suggest down-blending with virgin oil.

Independent Sampling and Services:

By *Eric [Signature]*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-63B3

RESULTS OF ANALYSIS:

DATE June 21, 1988

SAMPLE SUBMITTED: May 25, 1988

RESULTS REPORTED: June 21, 1988

Texoma

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	0.36	4,000 ppm
ARSENIC	0.001	5 ppm
CADMIUM	0.07	2 ppm
CHROMIUM (total)	0.004	10 ppm
LEAD	2.23	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

This oil meets the specifications of "used oil" and this material may  
be used in blending for industrial purposes.

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE August 4, 1988

SAMPLE SUBMITTED: August 20, 1988

RESULTS REPORTED: August 1, 1988

Special Sulfur determination for Frank Brothers

PARAMETER	RESULT	SPEC.
Flash Point		140 F. or Greater
% Chlorine		4,000 ppm
ARSENIC		5 ppm
CADMIUM		2 ppm
CHROMIUM (total)		10 ppm
LEAD		100 ppm
Sulfur	Less than 0.2 %	

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

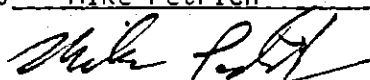
All three samples of retained loads shipped to Frank Brothers as fuel

tested at less than 0.2 % Sulfur content. This is well below their

0.44 % requirement.

Independent Sampling and Services:

By Mike Petrich



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE September 27, 1988

SAMPLE SUBMITTED: September 15, 1988

RESULTS REPDRTED: September 27, 1988

*TANK #9*

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	0.17	4,000 ppm
ARSENIC	0.001	5 ppm
CADMIUM	1.59	2 ppm
CHROMIUM (total)	0.004	10 ppm
LEAD	95.1	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil is within the presecribed parameters for" used oil" as outlined in

Subpart E. part 266 40 CFR.

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE November 23, 1988

SAMPLE SUBMITTED: October 28, 1988

RESULTS REPORTED: November 23, 1988

House Stock, Custom Blended Oils Inc.

PARAMETER	RESULT	SPEC.
Flash Point	142 F.	140 F. or Greater
% Chlorine	0.02 %	4,000 ppm
ARSENIC	0.1 ppm	5 ppm
CADMIUM	1.31 ppm	2 ppm
CHROMIUM (total)	0.004 ppm	10 ppm
LEAD	122.0 ppm *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

Lead concentration is just slightly high, but reflects the trend downward of  
crankcase oil. Suggest blending with other stocks to achieve "used oil"  
compliance.

Independent Sampling and Services:

By Bill L. L.

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE November 23, 1988

SAMPLE SUBMITTED: October 28, 1988

RESULTS REPORTED: November 23, 1988

Southwest Waste Oil, Submitted by Custom Blended Oils Inc.

PARAMETER	RESULT	SPEC.
Flash Point	174 F.	140 F. or Greater
% Chlorine	0.18%	4,000 ppm
ARSENIC	0.30 ppm	5 ppm
CADMIUM	2.21 ppm *	2 ppm
CHROMIUM (total)	0.004 ppm	10 ppm
LEAD	90.8 ppm	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

Slight overage on the Cadmium concentration, otherwise this oil is well within the specifications for "used oil".

Independent Sampling and Services:

By *Bill Peterson*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE November 23, 1988

SAMPLE SUBMITTED: Oct. 28, 1988

RESULTS REPORTED: Nov. 23, 1988

R. & S. Waste Oil, Submitted by Custom Blended Oils Inc.

PARAMETER	RESULT	SPEC.
Flash Point	132 F. *	140 F. or Greater
% Chlorine	0.21 %	4,000 ppm
ARSENIC	0.2 ppm	5 ppm
CADMIUM	1.48 ppm	2 ppm
CHROMIUM (total)	0.004 ppm	10 ppm
LEAD	103.0 ppm *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS DOTHER WISE INDICATED.

## COMMENTS:

The Flash Point of this sample is somewhat low, however even trace quantities of aliphatic, and/or aromatic hydrocarbons could create this situation.  
Lead is also just over the limit proscribed by the F.P.A. specifications.

Independent Sampling and Services:

By *Bill Etnier*



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE November 23, 1988

SAMPLE SUBMITTED: October 28, 1988

RESULTS REPORTED: November 23, 1988

Jerry Remer, Waste Oil, Submitted by Custom Blended Oils Inc.

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	0.04 %	4,000 ppm
ARSENIC	0.1 ppm	5 ppm
CADMIUM	2.16 ppm *	2 ppm
CHROMIUM (total)	0.004 ppm	10 ppm
LEAD	80.9 ppm	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil shows just a slight increase in the Cadmium concentration. The other parameters reflect a "used oil" characteristic.

Independent Sampling and Services:

By Bill Estlin



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PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 331-2900  
TELEX: 285950 COMTECO SH UR  
FAX: (312) 333-3060

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

December 21, 1988

ATTN: Ron Winkle

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Sample I.D.: New Blend  
200-400

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 12/16/88

Analysis report no. 71-67802

## Gravity At:

Specific at 60/60°F ..... 0.9659  
Lb per gal. at 60°F ..... 8.044  
°API ..... 15.0

## Heating Value:

Btu/lb. .... 18,191  
Btu/gal. at 60°F ..... 146,328

Sulfur Content ..... 1.98 % By Weight

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. C.*

Manager, South Holland Laboratory

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16130 VAN DRUNEN RD., P.O. BOX 1041  
SOUTH HOLLAND, ILLINOIS 60468  
TELEPHONE: (312) 953-9300  
TELEX: 285950 COMTE  
FAX: (312) 953-9301

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

December 23, 1988

ATTN: Larry Winkle

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Sample I.D.: New Blend  
100-500

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 12/22/88

Analysis report no. 71-68053

## Gravity At:

Specific at 60/60°F .....	0.9646
Lb per gal. at 60°F .....	8.033
°API .....	15.2

## Heating value:

Btu/lb. ....	18,308
Btu/gal. at 60°F .....	147,068

Sulfur content ..... 1.74 % By Weight

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

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F-464 DES/ds

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# INDEPENDENT SAMPLING AND SERVICES, INC

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Tank 10

DATE 1/4/1989

SAMPLE SUBMITTED: 12/6/1988

REPORTED: 12/30/1988

SOURCE: \_\_\_\_\_

PARAMETER	RESULT	SPECIFICATION
Flash Point	196° F	140 F. or Gre.
% Chlorine	1.90	4,000 ppm
ARSENIC	Less than 0.03	5.0 ppm
CADMIUM	1.55	2.0 ppm
CHROMIUM (total)	Less than 0.004	10.0 ppm
LEAD	86.4	100.0 ppm

\* Exceeds current standards for "Used Oil"

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Independent Sampling and Services Inc.

By *Mike P. Smith*

# INDEPENDENT SAMPLING AND SERVICES, INC.

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R&S Waste oil

DATE 1/4/1989

SAMPLE SUBMITTED: 12/6/1988

RESULTS REPORTED: 12/30/1988

SOURCE: \_\_\_\_\_

PARAMETER	RESULT		SPECIFICATION
Flash Point		154° F	140 F. or Greater
% Chlorine		0.70	4,000 ppm
ARSENIC		0.10	5.0 ppm
CADMIUM		2.13 *	2.0 ppm
CHROMIUM (total)	Less than	0.004	10.0 ppm
LEAD		83.4	100.0 ppm

\* Exceeds current standards for "Used Oil"

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Independent Sampling and Services Inc.

By *Mark L. Hill*

# INDEPENDENT SAMPLING AND SERVICES, INC.

P.O. BOX 822, 1551 WEST 187TH STREET, HOMewood, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Illinois Recovery

DATE 1/4/1989

SAMPLE SUBMITTED: 12/6/1988

RESULTS REPORTED: 12/30/1988

SOURCE: \_\_\_\_\_

PARAMETER	RESULT	SPECIFICATION
Flash Point	194° F	140 F. or Greater
% Chlorine	0.19	4,000 ppm
ARSENIC	0.06	5.0 ppm
CADMIUM	1.81	2.0 ppm
CHROMIUM (total)	Less than 0.004	10.0 ppm
LEAD	93.7	100.0 ppm

\* Exceeds current standards for "Used Oil"

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Independent Sampling and Services Inc.

By

Mh Patch

RECEIVED  
MAR 20 1989

OFFICE OF RCRA  
Waste Management Division  
U.S. EPA, REGION V

January 5, 1987

Custom Blended Oils Inc.  
P.O. Box 41  
Peotone Illinois 60468

ATTN: Mr. David Wheeland

*Knox College  
North Chicago*

RE: Analysis of Blended  
Stock, #5 Oil.

Dear Mr. Wheeland,

We are pleased to submit the following analytical information relative to the sample we picked-up of the subject oil.

The analytical work was delayed due to the rush of work prior to the holidays, and we apologize for any inconvenience that this may have caused you.

The parameters and results are listed as follows:

PARAMETER	RESULT
B.T.U. per lb.	18,973
% Sulfur	0.59%
% Chlorine	0.20%
Flash Point, Pensky Martens,	200 F. +
Bottom Sediment and Water	Less than 1%
Metals:	
Arsenic	.04 ppm
Chromium Total	3.55 ppm
Cadmium	1.78 ppm
Lead	298.00 ppm
Ash	0.78 %
Viscosity SUS @ 100 F.	297 sec

The results from samples 61 through 63 reflecting the properties of the received oils will be forthcoming.

Thank you for your patience in this matter.

*Bill Petrich*  
Bill Petrich

*January  
1987*

*Through*

*December  
1987*



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16130 VAN DRUNEN RD., P.O. BOX  
SOUTH HOLLAND, IL 60  
TELEPHONE: (312) 264-1  
TELEX: 285950 COMTECO SH

CUSTOM BLENDED OILS, INC.  
P.O. Box #41  
Peotone, IL 60468

January 12, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample #5 Oil  
reported to us

#5 Oil  
1/5/87

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 1/6/87

Analysis report no. 71-32255 Arsenic To Follow

Ash Content .....	0.43 % by weight
Flash Point, Pensky-Martens .....	184°F
Gravity:	
Specific at 60/60°F .....	0.9279
Lbs./gallon at 60°F .....	7.727
°API .....	21.0
Heating value:	
Btu/lb. ....	18,300
Btu/gal. at 60°F .....	141,404
Sulfur Content, Bomb Method .....	0.65 % by weight
Viscosity at:	
100°F Saybolt Universal .....	476 seconds
100°F Kinematic .....	102.7 centistokes
Lead, Pb .....	154 ppm, as rec'd
Cadmium, Cd .....	1.24 ppm, as rec'd
Chromium, Cr .....	0.58 ppm, as rec'd
Halogens .....	451 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



Charter Member

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PLEASE ADDRESS ALL CORRESPONDENCE  
16130 VAN DRUNEN RD., P.O. BOX 1  
SOUTH HOLLAND, IL 60486  
TELEPHONE: (312) 285-9500  
TELEX: 285950 COMTECO

CUSTOM BLENDED OILS, INC.  
P.O. Box #41  
Peotone, IL 60468

January 12, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample #5 Oil  
reported to us

#5 Oil  
1/5/87

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 1/6/87

Analysis report no. 71-32255 Arsenic To Follow

Ash Content .....	0.43 % by weight
Flash Point, Pensky-Martens .....	184°F
Gravity:	
Specific at 60/60°F .....	0.9279
Lbs./gallon at 60°F .....	7.727
°API .....	21.0
Heating value:	
Btu/lb. ....	18,300
Btu/gal. at 60°F .....	141,404
Sulfur Content, Bomb Method .....	0.65 % by weight
Viscosity at:	
100°F Saybolt Universal .....	476 seconds
100°F Kinematic .....	102.7 centistokes
Lead, Pb .....	154 ppm, as rec'd
Cadmium, Cd .....	1.24 ppm, as rec'd
Chromium, Cr .....	0.58 ppm, as rec'd
Halogens .....	451 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

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16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS, INC.  
P.O. Box #41  
Peotone, IL 60468

January 12, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample #6 Oil  
reported to us

#6 Oil  
1/5/87

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 1/6/87

Analysis report no. 71-32256

Ash Content .....	0.13 % by weight
Heating value:	
Btu/lb. ....	18,135
Sulfur Content, Bomb Method .....	0.91 % by weight
Lead, Pb .....	20.4 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cw*

Manager, South Holland Laboratory



Charter Member

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11/27/87

SAMPLE SOURCE: #5 OIL, CUSTOM BLENDED OILS INC.

SAMPLE SUBMITTED: JANUARY 6, 1987

RESULTS SUBMITTED: JANUARY 15, 1987

PARAMETER;	RESULT;	SPEC;
Flash Point	: 200 F.	140 F.
% Chlorides	: 0.05%	4,000 ppm — 50
Arsenic	: NOT RUN	5 ppm
Cadmium	: 1.12 PPM	2 ppm
Chromium (total)	: 0.284 PPM	10 ppm
Lead	: 32.60 PPM	100 ppm —

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f: 455 SECS.

SULFUR CONTENT: 0.76%

ASH CONTENT: 0.75%

A. I. GRAVITY: 21.1 @ 60 f. ✓

U. PER LB.: 18,203

B.S. & W : NOT RUN %

Independent Sampling and Services;

*Bill Petrich*  
BY: BILL PETRICH

TESTS - FROM - 4 - 2 BLEND  
HOUSE - WITH - #6 FROM - DRAIN  
OUT - OF - ALLIED.

# #5-CIL BLEND. LAB. RESULTS

4-2-MIX

1/13/86

PETRICH

## COMM. TESTING

	- 21.1	21
(SPS-100°)	- 455	476
	- 200°F	184°
	- 0.75	0.43
R	- 0.76	0.65
AL 18,203	- 140,564	18,300 - 141,404
C	-	
M	- 1.12	1.24 PPM
		0.58 " "
PM	- 0.28	0.58 " "
LE	LESS THAN 500	451 " "
	32.6	154 " "



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16130 VAN DRUNEN RD.  
SOUTH HOLLAND, IL 60486  
TELEPHONE: (312) 953-9300  
TELEX: 285950 CTE

CUSTOM BLENDED OILS, INC.  
P.O. Box #41  
Peotone, IL 60468

ATTN: David F. Wheeland

January 27, 1987

Sample identification  
by Custom Blended Oils,

Kind of sample #5 Oil  
reported to us

#5 Oil  
1/5/87

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 1/6/87

Analysis report no. 71-32255 Complete Result

Arsenic, As ..... 0.04 ppm, as rec'd

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F-464

SLK/ds

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

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16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS, INC.  
P.O. Box #41  
Peotone, IL 60468

ATTN: David F. Wheeland

January 27, 1987

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample #5 Oil  
reported to us

#5 Oil  
1/5/87

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 1/6/87

Analysis report no. 71-32255 Complete Results

Arsenic, As ..... 0.04 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



Charter Member

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3312900

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 CDMTECO SH UR

CUSTOM BLENDED OILS. INC.

P.O. Box #41

Peotone, IL 60468

ATTN: David F. Wheeland

March 24, 1987

Sample identification

by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

821-4747

Sample taken at ----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 3/3/87

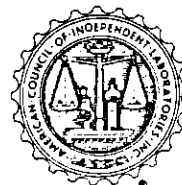
Analysis report no. 71-34960

Ash Content ..... 1.24 % by wt.  
Flash Point, Pensky-Martens .... 128°F  
Sulfur Content, Bomb Method .... 0.34 % by wt.  
Arsenic, As ..... 1.0 ppm, as rec'd  
Lead, Pb ..... 57.0 ppm, as rec'd  
Cadmium, Cd ..... 0.6 ppm, as rec'd  
Chromium, Cr ..... 3.6 ppm, as rec'd  
Total Halogens ..... 5609 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



Charter Member

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
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Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS. INC.  
P.O. Box #41  
Peotone, IL 60468

March 24, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

821-4747

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 3/3/87

Analysis report no. 71-34960

Ash Content ..... 1.24 % by wt.  
Flash Point, Pensky-Martens .... 128°F  
Sulfur Content, Bomb Method .... 0.34 % by wt.  
Arsenic, As ..... 1.0 ppm, as rec'd  
Lead, Pb ..... 57.0 ppm, as rec'd  
Cadmium, Cd ..... 0.6 ppm, as rec'd  
Chromium, Cr ..... 3.6 ppm, as rec'd  
Total Halogens ..... 5609 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



Charter Member

Not Copy Watermarked  
For Your Protection

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

SLK/ds



SAMPLE SOURCE: E&L Tank Cleaners

SAMPLE SUBMITTED: 2/2/87

RESULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: >200 F	140 F.
% Chlorides	: <0.05	4,000 ppm
Arsenic	: <0.001	5 ppm
Cadmium	: 1.07	2 ppm
Chromium (total)	: 0.250	10 ppm
Lead	: 300.0 *	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

A.P.I. GRAVITY: @ 60 f.

WATER PER LB.:

B.S. & W : %

Independent Sampling and Services;

BY: Daniel Petrich

SAMPLE SOURCE: R&S Waste Oil

SAMPLE SUBMITTED: 2/2/87

RESULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: >200 F	140 F.
% Chlorides	: <0.05	4,000 ppm
Arsenic	: <0.001	5 ppm
Cadmium	: 0.68	2 ppm
Chromium/(total)	: <0.010	10 ppm
Lead	: 535 *	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

A.P.I. GRAVITY: @ 60 f.

U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

BY: Daniel Petrich

AMPLE SOURCE: E&L Tank Cleaners

AMPLE SUBMITTED: 2/2/87

SULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
Ash Point	: >200 F	140 F.
Chlorides	: <0.05	4,000 ppm
Acid	: <0.001	5 ppm
Water	: 1.07	2 ppm
Sulfur (total)	: 0.230	10 ppm
Lead	: 300.0 *	100 ppm

Exceeds current standard for "Used Oil":

ALL RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

Viscosity SUS @ 100 F:

Sulfur Content:

Water Content:

A.P. GRAVITY: 5.50 F.

S.U. PER LB.:

S. & W:

Independent Sampling and Services;

BY: Daniel Petrich

RECEIVED

APR 20 1987

IEPA-D

MPLE SOURCE: R&S Waste Oil

MPLE SUBMITTED: 2/2/87

SULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
ash Point	: 1200 F	140 F.
Chlorides	: (0.05	4,000 ppm
senic	: (0.001	5 ppm
dmium	: 0.68	2 ppm
romium (total)	: (0.010	10 ppm
ad	: 535 *	100 ppm

xceeds current standard for "Used Oil":

TA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

SCOSITY SUS @ 100 f;

: LFUR CONTENT:

H CONTENT:

P.I. GRAVITY: @ 60 f.

.U. PER LB.:

S. & W : %

dependent Sampling and Services;

BY: Daniel Petrich

RECEIVED

APR 20

ICP

MPLE SOURCE: 111 Recovery Co.

MPLE SUBMITTED: 2/2/87

SULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
ash Point	: >200 F	140 F.
Chlorides	: <0.05	4,000 ppm
senic	: 0.211	5 ppm
dmium	: 0.55	2 ppm
romium (total)	: <0.01	10 ppm
ad	: 278 *	100 ppm

xceeds current standard for "Used Oil":

TA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

SCOSITY SUS @ 100 F:

LFUR CONTENT:

4 CONTENT:

2.1. GRAVITY: @ 60 F.

.U. PER LB.:

S. & W : %

dependent Sampling and Services;

BY: Daniel Petrich

ReCe

APR 5

Black & Veatch, Inc.

SAMPLE SUBMITTED: 2/27/87

SAMPLE SUBMITTED: 2/25/87

PARAMETER:	RESULT:	UNIT:
Ash Point	: 129 F w	140 F
Chlorides	: 10.05	4,000 ppm
Sulfur	: 10.001	3 ppm
Iron	: 1.4%	3 ppm
Lead (total)	: 0.009	10 ppm
Lead	: 417	100 ppm

Exceeds current standards for "Used Oil".

ALL RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE NOTED.

SECURITY SUS @ 100 ft

LEAD CONTENT:

W CONTENT:

A.P. GRAVITY: @ 60 ft

A.U. PER LB.:

S. & W.:

Independent Sampling and Services;

By: Daniel Patrish

RECEIVED  
APR 20 1987  
EPA-DLPC

SAMPLE SOURCE: Atlas Oil Co.

SAMPLE SUBMITTED: 2/2/87

RESULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: 129 F *	140 F.
% Chlorides	: <0.05	4,000 ppm
Arsenic	: <0.001	5 ppm
Cadmium	: 1.91	2 ppm
Chromium (total)	: 0.609	10 ppm
Lead	: 417	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

A.P.I. GRAVITY: @ 60 f.

U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

BY: Daniel Petrich

SAMPLE SOURCE: 111 Recovery Co.

SAMPLE SUBMITTED: 2/2/87

RESULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: >200 F	140 F.
% Chlorides	: <0.05	4,000 ppm
Arsenic	: 0.211	5 ppm
Cadmium	: 0.95	2 ppm
Chromium (total)	: <0.01	10 ppm
Lead	: 272 *	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

A.P.I. GRAVITY: @ 60 f.

( .U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

BY: Daniel Petrich



**E. W. SAYBOLT & CO., INC.**

P. O. BOX 129  
ARGO, ILLINOIS 60501  
312-582-4714

LABORATORY ANALYSIS REPORT

OFFICE \_\_\_\_\_ ARGO \_\_\_\_\_

CUSTOMER REF. NO.: \_\_\_\_\_  
DATE: April 3, 1987

VESEL/TANK(S): \_\_\_\_\_  
LABORATORY NO.: 3138  
INVOICE NO.: \_\_\_\_\_ (ID) 7964

DESCRIPTION

Sample designated as:  
Fuel Oil

Identifying Marks:  
Submitted Sample

Submitted by:

Custom Blended Oils

Client:

Custom Blended Oils, Inc.

NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of E. W. Saybolt & Co., Inc.
- Results were based on analysis made at the time samples were received at the laboratory.
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Sample nomenclature is designated by the customer.

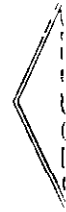
ANALYSIS

Gross BTU'S/gallon ASTM D-240

143,952

MEMBERS ASTM - API - SAE

E. W. SAYBOLT & CO., INC.



ARGO, ILLINOIS bucu  
312-582-4714

OFFICE ARGO

DESCRIPTION

Sample designated as:  
Fuel Oil

Identifying Marks:  
Submitted Sample

Submitted by:  
Custom Blended Oils

Client:  
Custom Blended Oils, Inc.

NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of E. W. Saybolt & Co., Inc.
- Results were based on analysis made at the time samples were received at the laboratory.
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Sample nomenclature is designated by the customer.

ANALYSIS

CUSTOMER REF. NO.:  
DATE: April 3, 1987

VESSEL/TANK(S):  
LABORATORY NO.: 3138  
INVOICE NO.: (ID) 7964

Gross BTU'S/gallon ASTM D-240

143,952

MEMBERS ASTM API - BAE

E. W. SAYBOLT & CO., INC.

OFFICE ARGO

**DESCRIPTION**

Sample designated as:  
Decanted Oil

Identifying Marks:  
S/T 5-17 @ GATX-Bedford  
Park, IL on 4/3/87

Submitted by:  
E.W. Saybolt & Co., Inc.

Client:  
Ameropan Oil/Custom  
Blended Oils

**NOTES**

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of E. W. Saybolt & Co., Inc.
- Results were based on analysis made at the time samples were received at the laboratory.
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Sample nomenclature is designated by the customer.

CUSTOMER REF. NO.: \_\_\_\_\_  
DATE: April 3, 1987

VESEL/TANK(S): S/T 5-17  
LABORATORY NO.: 3135  
INVOICE NO.: (ID) 7963

**ANALYSIS**

Gravity API @ 60°F ASTM D-287	-3.2
Sulphur & Wt. ASTM D-1552	3.89%
Flash PM ASTM D-93	195°F
S & W & ASTM D-1796	0.1%
Vis. SFS @ 122°F ASTM D-88	40.2 sec.
Pour Point ASTM D-97	40°F
Gross BTU'S/gallon	160,498

MEMBERS ASTM - AI - SE

*[Signature]*  
E.W. SAYBOLT & CO., INC.



# COMMERCIAL TESTING & ENGINEERING CO.

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Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS #  
16130 VAN

TELE

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

April 10, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended

Kind of sample  
reported to us Oil

Oil Sample  
5-14

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 4/9/87

Analysis report no. 71-36952

## Gravity:

Specific at 60/60°F .....	0.9692
Lb per gal. at 60°F .....	8.071
°API .....	14.5

## Heating value:

Btu/lb. ....	17,858
Btu/gal. at 60°F .....	144,136

Sulfur Content ..... 1.64 % by weight

Water by distillation ..... 2.57 % by volume

Lead, Pb ..... 124.7 ppm, as recd

Total Halogens ..... 621.8 ppm, as recd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

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For Your Protection

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

F-464 SLK/ds

SAMPLE SOURCE: R&S Waste Oil

SAMPLE SUBMITTED: 3/23/87

RESULTS SUBMITTED: 4/13/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: 120 F	140 F.
% Chlorides	: <0.1	4,000 ppm
Arsenic	: <0.1	5 ppm
Cadmium	: 2.68*	2 ppm
Chromium (total)	: <0.01	10 ppm
Lead	: 508*	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

P. I. GRAVITY: @ 60 f.

T. U. PER LB.:

B. S. & W : %

Independent Sampling and Services;

  
BY: Daniel Petrich

SAMPLE SOURCE: Atlas

SAMPLE SUBMITTED: 3/23/87

RESULTS SUBMITTED: 4/13/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: >200 F	140 F.
% Chlorides	: <0.1	4,000 ppm
Arsenic	: <0.1	5 ppm
Cadmium	: 2.90*	2 ppm
Chromium (total)	: <0.01	10 ppm
Lead	: 328*	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

( P.I. GRAVITY: @ 60 f.

( T.U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

  
BY: Daniel Petrich

SAMPLE SOURCE: E&L Tank Cleaners

SAMPLE SUBMITTED: 3/23/87

RESULTS SUBMITTED: 4/13/87


PARAMETER;	RESULT;	SPEC;
Flash Point	: >200 F	140 F.
% Chlorides	: 0.15	4,000 ppm
Arsenic	: <0.1	5 ppm
Cadmium	: 1.66	2 ppm
Chromium (total)	: <0.01	10 ppm
Lead	: 166*	100 ppm

\*Exceeds current standard for "Used Oil":

\* DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

\* VISCOSITY SUS @ 100 f:  
SULFUR CONTENT:  
ASH CONTENT:  
P.P.I. GRAVITY: @ 60 f.  
T.U. PER LB.:  
B.S. & W : %

Independent Sampling and Services;

  
BY: Daniel Petrich

SAMPLE SOURCE: ILL Rec.

SAMPLE SUBMITTED: 3/23/87

RESULTS SUBMITTED: 4/13/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: 155 F	140 F.
% Chlorides	: 0.27	4,000 ppm
Arsenic	: <0.1	5 ppm
Cadmium	: 3.24*	2 ppm
Chromium (total)	: <0.01	10 ppm
Lead	: 483*	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

P.I. GRAVITY: @ 60 f.

T.U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

  
BY: Daniel Petrich





# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

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PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 1041  
SOUTH HOLLAND, IL 60488  
TELEPHONE: (312) 261-1100  
TELEX: 285950 COMTECO

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

April 16, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Code House

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 4/16/87

Analysis report no. 71-37207

## Gravity:

Specific at 60/60°F .....	0.8984
Lb per gal. at 60°F .....	7.481
°API .....	26.0

## Heating value:

Btu/lb. ....	18,190
Btu/gal. at 60°F .....	136,079

Sulfur Content ..... 0.55 % by weight

Water by distillation ..... 4.40 % by volume

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, South Holland Laboratory

Original Copy Watermarked  
For Your Protection

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES



Charter



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# COMMERCIAL TESTING & ENGINEERING CO.

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PLEASE ADDRESS ALL  
16130 VAN DR  
SO  
TEL  
TELEX: 2

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

April 16, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oil

Kind of sample  
reported to us Oil

Code House

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 4/16/87

Analysis report no. 71-37207

## Gravity:

Specific at 60/60°F .....	0.8984
Lb per gal. at 60°F .....	7.481
°API .....	26.0

## Heating value:

Btu/lb. ....	18,190
Btu/gal. at 60°F .....	136,079

Sulfur Content ..... 0.55 % by weight

Water by distillation ..... 4.40 % by volume

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

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OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES



# COMMERCIAL TESTING & ENGINEERING CO.

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Member of the SGS Group (Société Générale de Surveillance)

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16130 VAN DRUNEN RD., P.O. BOX 1041  
SOUTH HOLLAND, IL 60486  
TELEPHONE: (312) 261-1100  
TELEX: 285950 COMTECO

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

April 16, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Code 2-4  
5-14

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 4/14/87

Analysis report no. 71-36093

## Gravity:

Specific at 60/60°F .....	0.8805
Lb per gal. at 60°F .....	7.332
°API .....	29.2

## Heating value:

Btu/lb. ....	18,996
Btu/gal. at 60°F .....	139,281

## Viscosity At:

100°F Saybolt Universal .....	88.3 seconds
100°F Kinematic .....	17.7 centistokes

Lead, Pb ..... 175.1 ppm, as rec'd

Total Halogens ..... 542.1 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

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For Your Protection

F-466 TK/As

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES



Charter



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PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS, INC.

P.O. Box 1041

Peotone, IL 60468

ATTN: David F. Wheeland

April 16, 1987

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Code 1-S  
5-14

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 4/14/87

Analysis report no. 71-36092

## Gravity:

Specific at 60/60°F .....	0.8871
Lb per gal. at 60°F .....	7.387
°API .....	28.0

## Heating value:

Btu/lb. ....	18,798
Btu/gal. at 60°F .....	138,859

## Viscosity At:

100°F Saybolt Universal .....	250.0 seconds
100°F Kinematic .....	53.9 centistokes

Lead, Pb ..... 208.6 ppm, as rec'd

Total Halogens ..... 740.6 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. C.*  
Manager, South Holland Laboratory



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For Your Protection

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

Charter Member

00150

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4-5866

[illegible]

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2  
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5

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2.5.7.2

Recd: 6/15/67  
JUN 19 1967

[illegible]



1150 Junction Avenue - Street and Incident 40673  
1-800-877-0167 ext. 40673

[illegible]

REC- 6/15/67

15-867

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

4361-7

121

2003

0.212

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6-17

541.0

3.76

10

0/15/67

15-867

1. Pot/Am  
dependent sampling  
Box 822

111 West 187th St.  
New York, N.Y. 10032

6/15/87

111

Rec'd: 6/15/87  
GEO # 19-867

Laboratory Sample ID No.:		3980-7							
DESCRIPTION: --->		III. Recovery							
111.000194		>200°F							
0.73									
<.003									
5.51									
181.0									
3.00									





# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

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PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 CDMTECO SH UR

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

July 21, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us -----

Sample - #4 - Hopedale

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 7/20/87

Analysis report no. 71-40949

## Gravity:

Specific at 60/60°F ..... 0.8956  
Lb per gal. at 60°F ..... 7.457  
°API ..... 26.5

## Heating value:

Btu/lb. .... 19,064  
Btu/gal. at 60°F ..... 142,159

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



Charter Member



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRECTIONS TO:  
16130 VAN DRUNEN RD.  
SOUTH HOLLAND, IL 60486  
TELEPHONE: (312) 953-9300  
TELEX: 285950 C

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

July 23, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils,

Kind of sample  
reported to us -----

Sample - #4 - Hopedale

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 7/20/87

Analysis report no. 71-40949

Revised Report

## Gravity:

Specific at 60/60°F ..... 0.8956  
Lb per gal. at 60°F ..... 7.457  
°API ..... 26.5

## Heating value:

Btu/lb. .... 19,064  
Btu/gal. at 60°F ..... 142,159

Sulfur Content ..... 1.34 % by weight

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*  
Manager, South Holland Laboratory

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For Your Protection

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

July 27, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us -----

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 7/20/87

Analysis report no. 71-40948

Ash Content ..... 1.73 % by weight

Flash Point, Pensky-Martens ..... 185°F

Gravity:

Specific at 60/60°F ..... 0.9047

Lb. per gal. at 60°F ..... 7.534

°API ..... 24.9

Heating value:

Btu/lb. .... 18,727

Btu/gal. at 60°F ..... 141,089

Sulfur Content ..... 1.12 % by weight

Lead, Pb ..... 51.4 ppm, as rec'd

Cadmium, Cd ..... 0.7 ppm, as rec'd

Chromium, Cr ..... 17.9 ppm, as rec'd

Arsenic, As ..... <.2 ppm, as rec'd

Total Halogens ..... 1,618.8 ppm

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



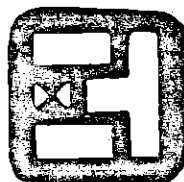
Charter Member

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OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

1150 Junction Avenue - Schererville, Indiana 46375  
1-219-322-2560 • 1-800-428-3311

Bill Petrich  
Independent Sampling  
1551 West 187th St.  
Homewood, IL 60430



19-1148

[illegible]

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6

RESULTS OF ANALYSIS: E & L

DATE 9/4/87

SAMPLE SUBMITTED: 8/7/87

RESULTS REPDRTE: 8/25/87

PARAMETER	RESULT	SP
Flash Point	170 F	140 F. or Great
% Chlorine	1.87 *	4,000 ppm
ARSENIC	0.4	5 pp
CADMIUM	2.22 *	2 pp
CHROMIUM (total)	4.77	10 pp
LEAD	206 *	100 p

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Daniel P. Felt

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R & S

DATE 9/4/87

SAMPLE SUBMITTED: 8/7/87

RESULTS REPORTED: 8/25/87

PARAMETER	RESULT	SPEC.
Flash Point	180 F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.4	5 ppm
CADMIUM	1.37	2 ppm
CHROMIUM (total)	21.7 *	10 ppm
LEAD	68.2	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By *Daniel J. Fitch*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: EBO Ader

DATE 9/4/87

SAMPLE SUBMITTED: 8/7/87

RESULTS REPDRTED: 8/25/87

PARAMETER	RESULT	SPEC.
Flash Point	200 F	140 F. or Greater
% Chlorine	0.29	4,000 ppm
ARSENIC	0.4	5 ppm
CADMIUM	0.201	2 ppm
CHROMIUM (total)	1.80	10 ppm
LEAD	17.4	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By *Daniel J. Clark*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: ILL Rec.

DATE 9/4/87

SAMPLE SUBMITTED: 8/7/87

RESULTS REPORTED: 8/25/87

PARAMETER	RESULT	SPEC.
Flash Point	200 F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.4	5 ppm
CADMIUM	1.37	2 ppm
CHROMIUM (total)	1.10	10 ppm
LEAD	104 *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Daniel J. Fitch



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Atlas

DATE 9/4/87

SAMPLE SUBMITTED: B/7/87

RESULTS REPDRTED: 8/25/87

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.4	5 ppm
CADMIUM	1.84	2 ppm
CHROMIUM (total)	0.962	10 ppm
LEAD	145 *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By *Daniel J. Felt*



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1906

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD.  
SOUTH HOLLAND, ILL. 60486  
TELEPHONE: (312) 953-9300  
TELEX: 285950 C

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

September 8, 1987

Sample identification  
by Custom Blended Oils,

Kind of sample  
reported to us -----

House Stock #1

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 9/2/87

Analysis report no. 71-43306

Sulfur Content ..... 0.45 % By Weight

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. P.*  
Manager, South Holland Laboratory

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OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN  
SOUTH HOLLAND, ILLINOIS 60471  
TELEPHONE: (312) 953-9300  
TELEX: 285950

► CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

September 8, 1987

Sample identification  
by Custom Blended Oils

Kind of sample  
reported to us -----

House Stock #2

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 9/2/87

Analysis report no. 71-43307

Sulfur Content ..... 0.56 % By Weight

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For Your Protection

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. C.*  
Manager, South Holland Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS AND RIVER LOADING FACILITIES

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R&S Waste oil

DATE 11/16/87

SAMPLE SUBMITTED: 11/1/87

RESULTS REPDRTE: 11/16/87

PARAMETER	RESULT	SPEC.
Flash Point	145 F.	140 F. or Greater
% Chlorine	0.09	4,000 ppm
ARSENIC	Less than 0.03	5 ppm
CADMIUM	0.538	2 ppm
CHROMIUM (total)	Less than 0.01	10 ppm
LEAD	24.1	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By

*Daniel J. Fitch*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Atlas

DATE 11/16/87

SAMPLE SUBMITTED: 11/1/87

RESULTS REPORTED: 11/16/87

PARAMETER	RESULT	SPEC.
Flash Point →	*110 F.	140 F. or Greater
% Chlorine	0.18	4,000 ppm
ARSENIC	Less than 0.03	5 ppm
CADMIUM	0.865	2 ppm
CHROMIUM (total)	Less than .01	10 ppm
LEAD	84.0	100 ppm

Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By

*Daniel Petrich*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-638

RESULTS OF ANALYSIS: CBO Ford 10/30

DATE 11/16/87

SAMPLE SUBMITTED: 11/1/87

RESULTS REPORTED: 11/16/87

PARAMETER	RESULT	SPEC
Flash Point	170 F.	140 F. or Greater
% Chlorine	0.26	4,000 ppm
ARSENIC	Less than .03	5 ppm
CADMIUM	0.374	2 ppm
CHROMIUM (total)	Less than .01	10 ppm
LEAD	13.4	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By

William J. Petrucci

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: CBO Greenfield

DATE 11/16/87

SAMPLE SUBMITTED: 11/1/87

RESULTS REPORTED: 11/16/87

PARAMETER	RESULT	SPEC.
Flash Point	170 F.	140 F. or Greater
% Chlorine	0.26	4,000 ppm
ARSENIC	0.76	5 ppm
CADMIUM	0.57	2 ppm
CHROMIUM (total)	Less than .01	10 ppm
LEAD	27.6	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By *Daniel F. Fitch*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-638

RESULTS OF ANALYSIS: CBO FORD, 10/27

DATE 11/16/87

SAMPLE SUBMITTED: 10/27/87

RESULTS REPORTED: 11/16/87

PARAMETER	RESULT	SPEC
Flash Point	Greater than 200 F	140 F. or Greater
% Chlorine	0.09	4,000 ppm
ARSENIC	Less than .03	5 ppm
CADMIUM	0.295	2 ppm
CHROMIUM (total)	.01	10 ppm
LEAD	25.1	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Daniel Petric





SINCE 1908

# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE  
16130 VAN DRUNEN RD., P.O. BOX  
SOUTH HOLLAND, IL 6  
TELEPHONE: (312) 264-  
TELEX: 285950 COMTECO SI

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

ATTN: Ron Winkle

December 10, 1987

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us #6 Oil

Code #2,000 AX  
4,000 H

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 12/10/87

Analysis report no. 71-48113

## Gravity :

Specific at 60/60°F ..... 0.9346  
Lb per gal. at 60°F ..... 7.783  
°API ..... 19.9

## Heating Value:

Btu/lb. .... 18,402  
Btu/gal. at 60°F ..... 143,223

Sulfur Content ..... 1.03 % By Weight

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, South Holland Laboratory

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OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS.



Charter M



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESP  
16130 VAN DRUNEN RD.  
SOUTH HOLLAND, IL 60476  
TELEPHONE: (312) 953-9300  
TELEX: 285950 CO

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

ATTN: Ron Winkle

December 10, 1987

Sample identification  
by Custom Blended Oils,

Kind of sample  
reported to us #6 Oil

Code #1,000 AX  
5,000 H

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 12/10/87

Analysis report no. 71-48112

## Gravity :

Specific at 60/60°F ..... 0.9106  
Lb per gal. at 60°F ..... 7.582  
°API ..... 23.9

## Heating Value:

Btu/lb. .... 18,585  
Btu/gal. at 60°F ..... 140,910

Sulfur Content ..... 0.75 % By Weight

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

David W. Cox  
Manager, South Holland Laboratory

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# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE 8/6/86

SAMPLE SUBMITTED: 7/25/86

RESULTS REPORTED: 7/31/86

PARAMETER	RESULT	SPEC.
Flash Point	160° F	140 F. or Greater
% Chlorine	0.28	4,000 ppm
ARSENIC	2.35	5 ppm
CADMIUM	0.55	2 ppm
CHROMIUM (total)	1.55	10 ppm
LEAD	* 242.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE 9/2/86

ILL. Rec. System

SAMPLE SUBMITTED: 8/15/86

RESULTS REPORTED: 8/27/86

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 200° F	140 F. or Greater
% Chlorine	0.33	4,000 ppm
ARSENIC	Less than 0.001	5 ppm
CADMIUM	1.26	2 ppm
CHROMIUM (total)	1.30	10 ppm
LEAD	509.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE 9/2/86

South West Oil

SAMPLE SUBMITTED: 8/15/86

RESULTS REPORTED: 8/27/86

PARAMETER	RESULT	SPEC.
Flash Point	180° F	140 F. or Greater
% Chlorine	Less than .05	4,000 ppm
ARSENIC	Less than 0.001	5 ppm
CADMIUM	1.36	2 ppm
CHROMIUM (total)	1.85	10 ppm
LEAD	204.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

Atlas Waste

DATE 9/2/86

SAMPLE SUBMITTED: 8/15/86

RESULTS REPORTED: 8/27/86

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 200° F	140 F. or Greater
% Chlorine	Less than 0.05	4,000 ppm
ARSENIC	Less than 0.001	5 ppm
CADMIUM	4:30-	2 ppm
CHROMIUM (total)	0.93	10 ppm
LEAD	418.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:  
R&S Waste Oil

DATE 9/2/86

SAMPLE SUBMITTED: 8/15/86

RESULTS REPORTED: 8/27/86

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 200° F	140 F. or Greater
% Chlorine	0.57	4,000 ppm
ARSENIC	Less than 0.001	5 ppm
CADMIUM	1.74	2 ppm
CHROMIUM (total)	1.85	10 ppm
LEAD	983.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-638

September 11, 1986

Mr. Ron Winkle  
E. & L. Tank Cleaners  
P.O. Box 41  
Peotone Illinois 60468

RE: Results of Composite Sample

Dear Ron,

Listed below are the results of the sample taken on 8/6/86, which is the material in #10 tank.

BTU/lb.	18,738
Viscosity	332 secs. SUS @ 100 F
Sulfur	0.5%
Ash	0.74%
B.S. & W.	0.05%

The viscosity was originally run at 115 centipoises, and the request of Mr. Wheeland was that it be run by SUS Universal Saybolt, which the above figure represents.

Thank you for your continued support of I.S.S.

Sincerely,

  
Mike Petrich



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Southwest Oil

DATE 9/22/86

SAMPLE SUBMITTED: 9/17/86

RESULTS REPORTED: 9/22/86

PARAMETER	RESULT	SPEC.
Flash Point	200° F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.81	2 ppm
CHROMIUM (total)	3.94	10 ppm
LEAD	274.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Atlas #32

DATE 9/22/86

SAMPLE SUBMITTED: 9/17/86

RESULTS REPORTED: 9/22/86

PARAMETER	RESULT	SPEC.
Flash Point	200° F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	2.34	2 ppm
CHROMIUM (total)	5.17	10 ppm
LEAD	504.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: ILL. Rec.

DATE 9/22/86

SAMPLE SUBMITTED: 9/17/86

RESULTS REPORTED: 9/22/86

PARAMETER	RESULT	SPEC.
Flash Point	200° F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.74	2 ppm
CHROMIUM (total)	3.45	10 ppm
LEAD	266.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R&S

DATE 9/22/86

SAMPLE SUBMITTED: 9/17/86

RESULTS REPORTED: 9/22/86

PARAMETER	RESULT	SPEC.
Flash Point	142° F	140 F. or Greater
% Chlorine	1.1B	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.93	2 ppm
CHROMIUM (total)	3.69	10 ppm
LEAD	160.1	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Southwest

DATE 10/22/86

SAMPLE SUBMITTED: 10/17/86

RESULTS REPORTED: 10/22/86

PARAMETER	RESULT	SPEC.
Flash Point	200°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.14	2 ppm
CHROMIUM (total)	4.28	10 ppm
LEAD	187.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Atlas

DATE 10/22/86

SAMPLE SUBMITTED: 10/17/86

RESULTS REPORTED: 10/22/86

PARAMETER	RESULT	SPEC.
Flash Point	166°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.23	2 ppm
CHROMIUM (total)	3.86	10 ppm
LEAD	220.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: 111. Recovery

DATE 10/22/86

SAMPLE SUBMITTED: 10/17/86

RESULTS REPORTED: 10/22/86

PARAMETER	RESULT	SPEC.
Flash Point	180°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.52	2 ppm
CHROMIUM (total)	4.17	10 ppm
LEAD	337.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R.S. Waste Oil

DATE 10/22/86

SAMPLE SUBMITTED: 10/17/86

RESULTS REPORTED: 10/22/86

PARAMETER	RESULT	SPEC.
Flash Point	175°	140 F. or Greater
% Chlorine	D.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.18	2 ppm
CHROMIUM (total)	4.49	10 ppm
LEAD	544.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:                     

By Mike Petrich



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE 8/6/86

SAMPLE SUBMITTED: 7/25/86

RESULTS REPORTED: 7/31/86

PARAMETER	RESULT	SPEC.
Flash Point	160° F	140 F. or Greater
% Chlorine	0.28	4,000 ppm
ARSENIC	2.35	5 ppm
CADMIUM	0.55	2 ppm
CHROMIUM (total)	1.55	10 ppm
LEAD	* 242.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE 9/2/86

ILL. Rec. System

SAMPLE SUBMITTED: 8/15/86

RESULTS REPORTED: 8/27/86

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 200° F	140 F. or Greater
% Chlorine	0.33	4,000 ppm
ARSENIC	Less than 0.001	5 ppm
CADMIUM	1.26	2 ppm
CHROMIUM (total)	1.30	10 ppm
LEAD	509.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE 9/2/86

South West Oil

SAMPLE SUBMITTED: 8/15/86

RESULTS REPORTED: 8/27/86

PARAMETER	RESULT	SPEC.
Flash Point	180° F	140 F. or Greater
% Chlorine	Less than .05	4,000 ppm
ARSENIC	Less than 0.001	5 ppm
CADMIUM	1.36	2 ppm
CHROMIUM (total)	1.85	10 ppm
LEAD	204.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:  
Atlas Waste

DATE 9/2/86

SAMPLE SUBMITTED: B/15/B6

RESULTS REPORTED: 8/27/86

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 200° F	140 F. or Greater
% Chlorine	Less than 0.05	4,000 ppm
ARSENIC	Less than 0.001	5 ppm
CADMIUM	4-30-	2 ppm
CHROMIUM (total)	0.93	10 ppm
LEAD	418.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE 9/2/86

R&S Waste Oil

SAMPLE SUBMITTED: 8/15/86

RESULTS REPORTED: 8/27/86

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 200° F	140 F. or Greater
% Chlorine	0.57	4,000 ppm
ARSENIC	Less than 0.001	5 ppm
CADMIUM	1.74	2 ppm
CHROMIUM (total)	1.85	10 ppm
LEAD	983.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-61

September 11, 1986

Mr. Ron Winkle  
E. & L. Tank Cleaners  
P.O. Box 41  
Peotone Illinois 60468

RE: Results of Composite Sample

Dear Ron,

Listed below are the results of the sample taken on 8/6/86, which is the material in #10 tank.

8TU/lb.	18,738
Viscosity	332 secs. SUS @ 100
Sulfur	0.5%
Ash	0.74%
8.S. & W.	0.05%

The viscosity was originally run at 115 centipoises, and the request of Mr. Wheeland was that it be run by SUS Universal Saybolt, which the above figure represents.

Thank you for your continued support of I.S.S.

Sincerely,

  
Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Southwest Oil

DATE 9/22/86

SAMPLE SUBMITTED: 9/17/86

RESULTS REPDRTED: 9/22/86

PARAMETER	RESULT	SPEC.
Flash Point	200° F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.81	2 ppm
CHROMIUM (total)	3.94	10 ppm
LEAD	274.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Atlas #32

DATE 9/22/86

SAMPLE SUBMITTED: 9/17/86

RESULTS REPORTED: 9/22/86

PARAMETER	RESULT	SPEC.
Flash Point	200° F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	2.34	2 ppm
CHROMIUM (total)	5.17	10 ppm
LEAD	504.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: ILL. Rec.

DATE 9/22/86

SAMPLE SUBMITTED: 9/17/86

RESULTS REPORTED: 9/22/86

PARAMETER	RESULT	SPEC.
Flash Point	200° F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.74	2 ppm
CHROMIUM (total)	3.45	10 ppm
LEAD	266.0	100 ppm

\*Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R&S

DATE 9/22/86

SAMPLE SUBMITTED: 9/17/86

RESULTS REPORTED: 9/22/86

PARAMETER	RESULT	SPEC.
Flash Point	142° F	140 F. or Greater
% Chlorine	1.18	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.93	2 ppm
CHROMIUM (total)	3.69	10 ppm
LEAD	160.1	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6381

RESULTS OF ANALYSIS: Southwest

DATE 10/22/86

SAMPLE SUBMITTED: 10/17/86

RESULTS REPDRTED: 10/22/B6

PARAMETER	RESULT	SPEC
Flash Point	200°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.14	2 ppm
CHROMIUM (total)	4.28	10 ppm
LEAD	187.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: AtIas

DATE 10/22/B6

SAMPLE SUBMITTED: 10/17/B6

RESULTS REPORTED: 10/22/86

PARAMETER	RESULT	SPEC.
Flash Point	166°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.23	2 ppm
CHROMIUM (total)	3.86	10 ppm
LEAD	220.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS DOTHER WISE INDICATED.

CDMMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-636

RESULTS OF ANALYSIS: 111. Recovery

DATE 10/22/86

SAMPLE SUBMITTED: 10/17/86

RESULTS REPORTED: 10/22/86

PARAMETER	RESULT	SPE
Flash Point	180°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.52	2 ppm
CHROMIUM (total)	4.17	10 ppm
LEAD	337.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R.S. Waste Oil

DATE 10/22/86

SAMPLE SUBMITTED: 10/17/86

RESULTS REPORTED: 10/22/86

PARAMETER	RESULT	SPEC.
Flash Point	175°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.18	2 ppm
CHROMIUM (total)	4.49	10 ppm
LEAD	544.0	100 ppm

\* Exceeds current standard for "Used Oil"


DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services: 

By Mike Petrich

**1150 Junction Avenue - Schererville, Indiana 46375**  
**1-219-322-2560 • 1-800-428-3311**

**Ernie Winkle  
E&L Tank Cleaners  
PO Box 41  
Peotone, IL 60468**

**NO #:** 18-1248

[illegible]

**Continued on**

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: South West Oil

DATE 11/17/86

SAMPLE SUBMITTED: 11/2/86

RESULTS REPORTED: 11/15/86

PARAMETER	RESULT	SPEC.
Flash Point	165°	140 F. or Greater
% Chlorine	.05	4,000 ppm
ARSENIC	.04	5 ppm
CADMIUM	12.6	2 ppm
CHROMIUM (total)	2.86	10 ppm
LEAD	120	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6

RESULTS OF ANALYSIS: R & S

DATE 11/17/86

SAMPLE SUBMITTED: 11/2/86

RESULTS REPORTED: 11/15/86

PARAMETER	RESULT	SF
Flash Point	200°	140 F. or Great
% Chlorine	.05	4,000 ppm
ARSENIC	.04	5 pp
CADMIUM	1.47	2 pp
CHROMIUM (total)	2.14	10 pp
LEAD	148	100 p

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Atlas waste oil

DATE 11/17/86

SAMPLE SUBMITTED: 11/2/86

RESULTS REPORTED: 11/15/86

PARAMETER	RESULT	SPEC.
Flash Point	175°	140 F. or Greater
% Chlorine	0.4	4,000 ppm
ARSENIC	.04	5 ppm
CADMIUM	8.23	2 ppm
CHROMIUM (total)	4.21	10 ppm
LEAD	441	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Illinois Recovery

DATE 11/17/86

SAMPLE SUBMITTED: 11/2/86

RESULTS REPORTED: 11/15/86

PARAMETER	RESULT	SPEC.
Flash Point	200°	140 F. or Greater
% Chlorine	.05	4,000 ppm
ARSENIC	.04	5 ppm
CADMIUM	1.93	2 ppm
CHROMIUM (total)	3.16	10 ppm
LEAD	238	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

SAMPLE SOURCE: South West Oil

Sample NO. 62

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87


PARAMETER;	RESULT;	SPEC;
Flash Point:	200 F	140 F
% Chlorides:	0.36 %	4,000 ppm
Arsenic:	.04 ppm	5.0 ppm
Cadmium:	1.58 ppm	2.0 ppm
Chromium (total):	2.90 ppm	10.0 ppm
Lead:	276.0 ppm *	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This oil shows excessive lead concentrations and needs to be blended to meet the specifications set out for "Used Oil".

Independent Sampling and Services;

  
BY: Bill Petrich

SAMPLE SOURCE: South West Oil

Sample NO. 62

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87

PARAMETER;	RESULT;	SPEC;
Flash Point: 200 F	140 F	140 F.
% Chlorides:		4,000 ppm
Arsenic:		5 ppm
Cadmium:		2 ppm
Chromium (total):		10 ppm
Lead:		100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This oil shows excessive lead concentrations and needs to be down-blended to meet the specifications set out for "Used Oil".

Independent Sampling and Services;

  
BY: Bill Petrich

ADDITIONAL ANALYSES: Viscosity SUS @ 100 F. \_\_\_\_\_ seconds. Sulfur \_\_\_\_\_

B.T.U. \_\_\_\_\_ Ash \_\_\_\_\_ B.S.&W. \_\_\_\_\_ Gravity \_\_\_\_\_

SAMPLE SOURCE: R. & S. Waste Oil      Sample No. 61

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87

PARAMETER;	RESULT;	SPEC;
Flash Point: 200 F.	140 F.	140 F.
% Chlorides:		4,000 ppm
Arsenic:		5 ppm
Cadmium:		2 ppm
Chromium (total):		10 ppm
Lead:		100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This material shows excessive lead concentrations, and should be blended for use in industrial boiler applications only.

Independent Sampling and Services;

  
BY: Bill Petrich

ADDITIONAL ANALYSES: Viscosity SUS @ 100 F. \_\_\_\_\_ seconds. Sulfur \_\_\_\_\_

B. T. U. \_\_\_\_\_ Ash \_\_\_\_\_ B. S. & W. \_\_\_\_\_ Gravity \_\_\_\_\_

SAMPLE SOURCE: R. & S. Waste Oil      Sample No. 61

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87


PARAMETER;	RESULT;	SPEC;
Flash Point:	200 F.	140 F.
% Chlorides:	.05 %	4,000 ppm
Arsenic:	.04 ppm	5 ppm
Cadmium:	1.96 ppm	2.0 ppm
Chromium (total):	3.55 ppm	10 ppm
Lead:	301 ppm	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This material shows excessive lead concentrations, and should be do blended for use in industrial boiler applications only.

Independent Sampling and Services;

  
BY: Bill Petrich

SAMPLE SOURCE: Illinois Recovery Co.

Sample No. 63

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87


PARAMETER;	RESULT;	SPEC;
Flash Point:	200 F.	140 F.
% Chlorides:	.05 %	4,000 ppm
Arsenic:	.04 ppm	5.0 ppm
Cadmium:	1.78 ppm	2.0 ppm
Chromium (total):	3.26 ppm	10.0 ppm
Lead:	288 ppm *	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This oil shows excessive amounts of lead concentration and should be down-blended with other low lead fuels to an acceptable level.

Independent Sampling and Services;

BY:  Bill Petrich



SAMPLE SOURCE: Illinois Recovery Co.

Sample No. 63

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87


PARAMETER;	RESULT;	SPEC;
Flash Point: 200 F.	140 F.	140 F.
% Chlorides:		4,000 ppm
Arsenic:		5 ppm
Cadmium:		2 ppm
Chromium (total):		10 ppm
Lead:		100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This oil shows excessive amounts of lead concentration and should be down-blended with other low lead fuels to an acceptable level.

Independent Sampling and Services;

  
BY: Bill Petrich

ADDITIONAL ANALYSES: Viscosity SUS @ 100 F. \_\_\_\_\_seconds. Sulfur\_\_\_\_\_

B. T. U. \_\_\_\_\_Ash\_\_\_\_\_B. S. & W. \_\_\_\_\_Gravity\_\_\_\_\_

E. W. Searbolt & Co., Inc.

P. O. Box 179  
Alton, Illinois 62001  
312-382-4714

LABORATORY ANALYSIS REPORT

OFFICE \_\_\_\_\_

CUSTOMER REF. NO. \_\_\_\_\_  
DATE 12-18-86

DESCRIPTION \_\_\_\_\_

ANALYSIS

VESSEL/TANK(S): S/T 42-1  
LABORATORY NO.: 2899  
INVOICE NO.: (ID) 7527

Sample designated as:  
#5 Fuel Oil

Identifying Marks:  
S/T 42-1 Composite

Submitted by:  
T. W. Searbolt & Co., Inc.

Client:  
Allied Oil Co.

NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from a officer of E. W. Searbolt & Co., Inc.
- Results were based on analysis made of the time samples were received at the laboratory.
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Samples returned to the designator by the customer.

Gravity API @ 60°F ASTM D-287  
Sulphur % WT. ASTM D-1552  
Flash Pt ASTM D-93  
S & W % ASTM D-1796  
Vis, (SFS @ 122°F) ASTM D-88  
Pour Point ASTM D-97

12.0°F  
0.94%  
198°F  
0.5%  
113.7  
500

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMewood, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: House stock

DATE 11/17/86

SAMPLE SUBMITTED: 11/2/86

RESULTS REPORTED: 11/15/86

PARAMETER	RESULT	SPEC.
Flash Point	200°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	.04	5 ppm
CADMIUM	1.05	2 ppm
CHROMIUM (total)	1.31	10 ppm
LEAD	145	100 ppm

\*Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: House Stock

DATE 10/22/86

SAMPLE SUBMITTED: 10/17/86

RESULTS REPORTED: 10/22/86

PARAMETER	RESULT	SPEC.
Flash Point	158°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.24	2 ppm
CHROMIUM (total)	3.11	10 ppm
LEAD	171.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: House Stock

DATE 9/22/86

SAMPLE SUBMITTED: 9/17/86

RESULTS REPORTED: 9/22/86

PARAMETER	RESULT	SPEC.
Flash Point	200° F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.71	2 ppm
CHROMIUM (total)	3.69	10 ppm
LEAD	96.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

House stock

DATE 9/2/86

SAMPLE SUBMITTED: B/15/86

RESULTS REPORTED: 8/27/86

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 200° F	140 F. or Greater
% Chlorine	Less than 0.05	4,000 ppm
ARSENIC	Less than 0.001	5 ppm
CADMIUM	0.70	2 ppm
CHROMIUM (total)	0.93	10 ppm
LEAD	173.D	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-63

RESULTS OF ANALYSIS: B & D Oil

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPE
Flash Point	183 F.	140 F. or Greater
% Chlorine	<0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	0.265	2 ppm
CHROMIUM (total)	0.040	10 ppm
LEAD	8.39	100 pp

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

REMARKS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Independent Sampling and Services:

By Bill Stur

March 1988  
through  
December  
1988

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: ILL Recovery

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	148 F.	140 F. or Greater
% Chlorine	< 0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	0.750	2 ppm
CHROMIUM (total)	0.42	10 ppm
LEAD	67.8	100 ppm

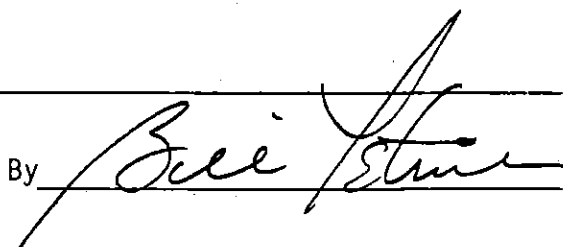
\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By





# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMewood, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Van Hosen

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	150 F.	140 F. or Greater
% Chlorine	< 0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	0.435	2 ppm
CHROMIUM (total)	0.044	10 ppm
LEAD	39.4	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

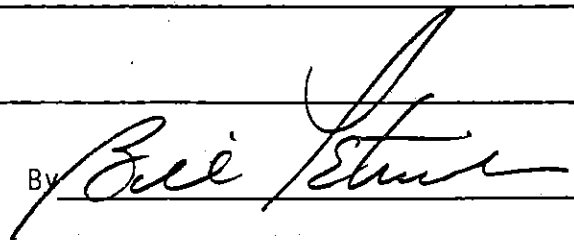
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Independent Sampling and Services:

By



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Tony

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-B-88

PARAMETER	RESULT	SPEC.
Flash Point	183 F.	140 F. or Greater
% Chlorine	<0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	1.23	2 ppm
CHROMIUM (total)	1.09	10 ppm
LEAD	*129	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

*Lead concentration is dropping but still exceeds specification.*

Independent Sampling and Services:

By

*Bruce E. Etna*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Interstate Pollution

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	158 F.	140 F. or Greater
% Chlorine	< 0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	0.590	2 ppm
CHROMIUM (total)	6.92	10 ppm
LEAD	* 126	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

*Lead must be down - blended to  
achieve compliance.*

Independent Sampling and Services:

By Bill Peterson

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R & S

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	165 F.	140 F. or Greater
% Chlorine	< 0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	1.46	2 ppm
CHROMIUM (total)	0.813	10 ppm
LEAD	173*	100 ppm

\* Exceeds current standard for "Used Oil"

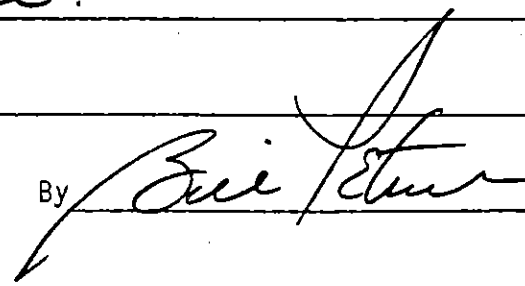
DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Lead content must be down-blended  
to achieve compliance.

Independent Sampling and Services:

By



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: CBO Greenfield

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	180 F.	140 F. or Greater
% Chlorine	< 0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	0.700	2 ppm
CHROMIUM (total)	0.227	10 ppm
LEAD	57.8	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: E & L

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	150 F.	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	1.15	2 ppm
CHROMIUM (total)	0.515	10 ppm
LEAD	*165	100 ppm

\*Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

*Lead is still high - and must  
be down - blended.*

Independent Sampling and Services:

By

*Bill Stone*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

MARCH 4, 1988

E. & L. Tank Cleaners  
P.O. Box 41  
Peotone Illinois 60468

ATTN: Ron Winkle

RE: Oil Results

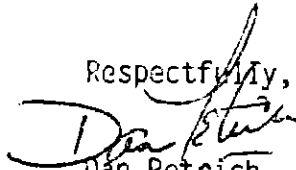
SAMPLES SUBMITTED: MARCH 4, 1988

PARAMETER:	Southwest Oil	Ill. Recovery	Texoma
Flashpoint	200 F +	200 F +	200 F +
Arsenic	0.04 ppm	0.19 ppm	0.37 ppm
Cadmium	2.63 ppm	1.57 ppm	2.36 ppm
Chromium Total	0.02 ppm	0.02 ppm	1.39 ppm
Lead	193 ppm*	96.10ppm	137.0 ppm*
% Chloride	Less than 0.04	0.04	0.04

\* Exceeds recommended standard for lead.

The figures represent a continuity, and a much lower concentration of lead than had been previously experienced.

Respectfully,

  
Dan Petrich  
I.S.S.

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

MARCH 4, 1988

E. & L. Tank Cleaners  
P.O. Box 41  
Peotone Illinois 60468

ATTN: Ron Winkle

RE: Oil Results

SAMPLES SUBMITTED: MARCH 4, 1988

PARAMETER:	Southwest Oil	Ill. Recovery	Texoma
Flashpoint	200 F +	200 F +	200 F
Arsenic	0.04 ppm	0.19 ppm	0.37 p
Cadmium	2.63 ppm	1.57 ppm	2.36 p
Chromium Total	0.02 ppm	0.02 ppm	1.39 p
Lead	193 ppm*	96.10ppm	137.0
% Chlorine      Less than	0.04	0.04	0.0

\* Exceeds recommended standard for lead.

The figures represent a continuity, and a much lower concentration of lead than has been previously experienced.

Respectfully,

  
Dan Petrich  
I.S.S.





CHICAGO LINE 312 / 821-4747  
PEOTONE LINE 312 / 258-6881  
P. O. BOX #41  
PEOTONE, IL 60468

## Quality Blended Fuel Oils

April 4, 1988

Mr. Eugene P. Theios, Manager  
Administrative Compliance Unit  
Compliance Section  
Division of Land Pollution Control  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield Illinois 62706

RE: 1970750002-Will County  
Pre-Enforcement Conference Letter  
March 23, 1988

Mr. Theios,

After receiving your Pre-Enforcement Letter of March 23, I was embarrassed for not having responded to the letter of February 8, 1988. The difficulty seems to have been our inability to locate the specific manifests outlined in the letter of February 8, 1988. (1652233 and 1261287). To date we have been unable to locate copies of either of those two manifests.

The additional manifest mentioned in your March 23, 1988 letter, (1261417) we have located, as well as the manifest relative to the Ford Motor Company of Indianapolis Indiana, (1652061).

At the suggestion of Mr. Bill Petrich, Bill Petrich, environmental services..., we will attempt to explain the confusion that was obviously generated by our lack of complete understanding of the regulations.

1. We had applied for a change in the name of our permit to Custom Blended Oils Inc. from E. & L. Tank Cleaners, because we generate fuel oil for heavy industry, and sell this product to industry as Custom Blended Oils Inc. We therefore wanted to operate under one corporate name.
2. As of April 4, 1988, our request for name change has not been ruled upon by the Illinois Environmental Protection Agency, Division of Land Pollution Control, and our phone call to Marla Layman indicated that the agency had until the 24th of April, (90 days) to make a decision on the name change.
3. Because of this, we contacted Mr. Bob Watson of the permit section, and were informed that if we sent down for supplemental permits, under the name Custom Blended Oils Inc. before the name change was approved, the applications would be rejected.
4. In 1987 permits were submitted to the agency for multi-stop service station used oil collection. The permits were made out on pink application forms. Many of the forms were sent back requesting additional information. When the

Multi-stop restricted to serv. stations.

Modified Operated Permit to ("Other Used Oils"),

application forms were available. We now have the green forms made out in the name of Custom Blended Oils Inc. and are awaiting the decision by the agency for the requested name change.

5. The use of the 000049 Stream Authorization Number by Ford Motor Company was not our doing. Their stream, (purchased oil) is taken to our facility in Greenfield Indiana, where it is agglomerated with other oils, purchased in Indiana. This oil is then brought to Peotone for final blending into useable fuel. Our understanding is that the manifest requirement would then apply when we bring used oil (Illinois "special waste"), from Greenfield to Peotone, it would be under a supplemental permit issued to Custom Blended Oils Inc. and not Ford Motor Company?
6. The state of Indiana no longer has restrictions on the hauling of used crankcase oil, and indeed encourages the re-use of this oil in accordance with the federal mandate to "minimize" waste, and re-cycle and recover in every instance possible. On this basis, will the Illinois Environmental Protection Agency continue to insist on manifests for "purchased" oil, not "waste"?


Mr. Petrich indicated that when he spoke with you, that some "thirty to thirty-five" manifests were now improperly executed, and that each represents a violation of the statute. On this basis we have directed our personnel as follows:

1. All manifests made out as of April 4, 1988, will have the name of the permit holding company, E. & L. Tank Cleaners.
2. All manifests will have the Stream Authorization Number, issued by the I.E.P.A. and the Illinois, Indiana, Wisconsin, Kentucky, Minnesota, Ohio, identification number, issued by those agencies, state and/or federal.
3. For each and every stream received by Custom Blended Oils Inc. a Stream Authorization number must be applied for on a green application sheet supplied by the I.E.P.A. with all of the information requested given.
4. In the case of "multi-stop" service station accumulations, each Licensed Waste Hauler who brings oil to Custom Blended Oils Inc. will have obtained an Illinois Generators Number on behalf of their multiple stops, and will supply to Custom Blended Oils Inc. samples of Oil (special waste), so that appropriate analyses may be performed prior to submission for Stream Authorization Number.
5. Samples of each days "receipts" of oil will be kept, and analyzed in accordance with Illinois Environmental Protection Agency Title 35, Subpart E: Used Oil Burned for Energy Recovery 726.143, 726.140.

We apologize for the confusion that was generated as a result of our not implementing policies and procedures as relates to manifest generation, and administration.

Please allow that Custom Blended Oils Inc. (E. & L. Tank Cleaners) will endeavor to conform with each and every aspect of the regulation in the future, and that our willingness to cooperate with the agency is hereby reaffirmed.

Respectfully,

  
Ernest Winkle  
President

for supplementary permit it is changed from a different facility.

MANIFESTS from Ford should say = <sup>Generator</sup> CBO Greendale to CBO Peotone, Ill. Our Generator # goes in ~~Gen~~ TOP Generator #. (where Ford's Gen. # was).

WI MANIFEST 's should read - <sup>CBO - WI (multi-stop)</sup> ~~Geny Peotone~~ - WI. to CBO Peotone (not Minut Lubes).

Proper ID for Used Oil - Used Oil or Crankcase Oil (Non-Haz.) <sup>(ORM)</sup> <sup>(Other Reg. Mgmt.)</sup>

WDO (Non Haz ORME NON HAZ) - in DOT Part of Manifest.  
used Oil) (To satisfy Dep. of Trans.)

Supplementary permit # for Ind & WI until we get Generic Per  
#.

MUST have Authorization # (ALL IL MANIFESTS).

Cindy Nelson - Hauling & P.U. w/ Trucks

Analysis WITHIN a year (green sheets).

1,000 every 3 mos - cannot be part of a multi-stop.

Generic is on composition of oil!

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 20, 1988

SAMPLE SUBMITTED: April 12, 1988

RESULTS REPORTED: April 20, 1988

Dukes # 101

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 140 F.	140 F. or Greater
% Chlorine	Less than 0.05%	4,000 ppm
ARSENIC	Less than 0.40 ppm	5 ppm
CADMIUM	1.60 ppm	2 ppm
CHROMIUM (total)	2.36 ppm	10 ppm
LEAD	122.0 ppm *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

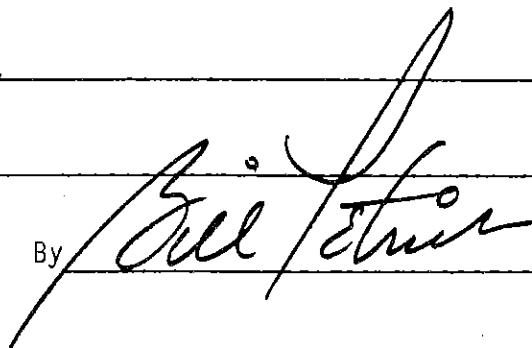
## COMMENTS:

This oil should be down-blended with virgin fuel, or recovered oils

containing less lead concentration.

Independent Sampling and Services:

By



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 20, 1988

SAMPLE SUBMITTED: April 12, 1988

RESULTS REPORTED: April 20, 1988

Greenfield # 102

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 140 F.	140 F. or Greater
% Chlorine	Less than 0.05%	4,000 ppm
ARSENIC	Less than 0.40 ppm	5 ppm
CADMIUM	2.00 ppm	2 ppm
CHROMIUM (total)	3.49 ppm	10 ppm
LEAD	130 ppm*	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

Although the lead concentration continues to drop in used crankcase oil,  
it still exceeds federal E.P.A. guidelines. Suggest down-blending with oils  
containing -0- lead.

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-63

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

Ford # 111

PARAMETER	RESULT	SPE
Flash Point	Greater than 200° F	140 F. or Greater
% Chlorine	3816 ppm	4,000 ppm
ARSENIC	Less than .04 ppm	5 ppm
CADMIUM	0.895 ppm	2 ppm
CHROMIUM (total)	1.15 ppm	10 ppm
LEAD	6.42 ppm	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil conforms to the criteria established by the federal E.P.A. for

"used oil".

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

Ill. Recovery, # 107

PARAMETER	RESULT	SPEC.
Flash Point	135 ° F. *	140 F. or Greater
% Chlorine	2632 ppm	4,000 ppm
ARSENIC	Less than 0.4 ppm	5 ppm
CADMIUM	2.52 ppm *	2 ppm
CHROMIUM (total)	3.84 ppm	10 ppm
LEAD	124.0 ppm *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil exceeds federal standards in Flash Point, Cadmium, and Lead, and should  
be blended with virgin oil to prepare material for customer use.

Independent Sampling and Services:

By 



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

Dukes # 108

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	786 ppm	4,000 ppm
ARSENIC	Less than .04 ppm	5 ppm
CADMIUM	1.67 ppm	2 ppm
CHROMIUM (total)	2.67 ppm	10 ppm
LEAD	148.0 ppm*	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This stream exceeds lead concentration as determined by federal E.P.A. and should

therefore be blended with non-lead bearing oil to reach conformity.

Independent Sampling and Services:

By Bill L. L...

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

R. & S. # 103

PARAMETER	RESULT	SPEC.
Flash Point	150° F.	140 F. or Greater
% Chlorine	2256 ppm	4,000 ppm
ARSENIC	Less than .04 ppm	5 ppm
CADMIUM	1.40 ppm	2 ppm
CHROMIUM (total)	1.84 ppm	10 ppm
LEAD	91.1 ppm	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

This stream conforms with federal E.P.A. guide lines for "used oil".

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

CBO # 104

PARAMETER	RESULT	SPEC.
Flash Point	170 ° F	140 F. or Greater
% Chlorine	407 ppm	4,000 ppm
ARSENIC	Less than .04 ppm	5 ppm
CADMIUM	1.10 ppm	2 ppm
CHROMIUM (total)	1.22 ppm	10 ppm
LEAD	30.3 ppm	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil stream conforms to the federal guidelines for used oil, and can be  
blended with other conforming streams.

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE April 30, 1988

SAMPLE SUBMITTED: April 18, 1988

RESULTS REPORTED: April 30, 1988

House Stock, # 109

PARAMETER	RESULT	SPEC.
Flash Point	N.E.	140 F. or Greater
% Chlorine	848 ppm	4,000 ppm
ARSENIC	Less than 0.4 ppm	5 ppm
CADMIUM	1.95 ppm	2 ppm
CHROMIUM (total)	3.11 ppm	10 ppm
LEAD	134.0 *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

The lead concentration in the house stock exceeds federal guidelines, and this material should be blended with virgin oil to make up customers product.

Independent Sampling and Services:

By Bill Peterson

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE May 17, 1988

SAMPLE SUBMITTED: May 6, 1988

RESULTS REPORTED: May 17, 1988

CBO sample #2 ISS 204

PARAMETER	RESULT	SPEC.
Flash Point	180° F	140 F. or Greater
% Chlorine	1,567 ppm	4,000 ppm
ARSENIC		5 ppm
CADMIUM		2 ppm
CHROMIUM (total)		10 ppm
LEAD		100 ppm
ASH	0.87	0.76-0.81

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil sample reflects "typical" analysis for blended fuel produced from

"used oil" containing "crankcase" oil, along with other recovered oils.

The sample was analysed in accordance with accepted A.P.I., A.S.T.M., and E.P.A.  
protocols.

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE May 17, 1988

SAMPLE SUBMITTED: May 6, 1988

RESULTS REPORTED: May 17, 1988

CBO Sample #1, ISS # 203

PARAMETER	RESULT	SPEC.
Flash Point	155 ° F	140 F. or Greater
% Chlorine	1,235 ppm	4,000 ppm
ARSENIC		5 ppm
CADMIUM		2 ppm
CHROMIUM (total)		10 ppm
LEAD		100 ppm
ASH	0.67 %	SAE: 0.76 to 0.81

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

This sample reflects the accepted properties of "used oil" from a crankcase source, and is not to be construed as "different" than other crankcase blended fuels produced from "used oil" sources.

COMMENTS:

Independent Sampling and Services:

By 

# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

May 27, 1988

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us -----

New Blend  
25-35

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 5/20/88

Analysis report no. 71-56638

Ash Content ..... 0.89 % By Weight

Flash Point, Pensky-Martens ..... 182°F

Gravity At:

Specific at 60/60°F ..... 0.9297

Lb per gal. at 60°F ..... 7.742

°API ..... 20.7

Heating Value:

Btu/lb. .... 18,024

Btu/gal. at 60°F ..... 139,542

Sulfur Content ..... 0.72 % By Weight

Viscosity At: SUSAT 100-7.7

122°F Syabolt Furol ..... 29.6 Seconds

122°F Kinematic ..... 62.7 Centistokes

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



Charter Member

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

DWC/ds

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE June 21, 1988

SAMPLE SUBMITTED: may 25, 1988

RESULTS REPORTED: June 21, 1988

Berreth Oil.

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	0.20	4,000 ppm
ARSENIC	0.001	5 ppm
CADMIUM	0.210	2 ppm
CHROMIUM (total)	10.13 *	10 ppm
LEAD	44.7	100 ppm

\*Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil shows an elevated level of chromium, and should be re-checked to

ascertain if this material is intrinsic to crankcase oil.

Suggest down-blending with virgin oil.

Independent Sampling and Services:

By 



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE June 21, 1988

SAMPLE SUBMITTED: May 25, 1988

RESULTS REPORTED: June 21, 1988

Texoma

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	0.36	4,000 ppm
ARSENIC	0.001	5 ppm
CADMIUM	0.07	2 ppm
CHROMIUM (total)	0.004	10 ppm
LEAD	2.23	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil meets the specifications of "used oil" and this material may  
be used in blending for industrial purposes.

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE June 21, 1988

SAMPLE SUBMITTED: May 25, 1988

RESULTS REPORTED: June 21, 1988

Southwest Waste Oil

PARAMETER	RESULT	SPEC.
Flash Point	165 F.	140 F. or Greater
% Chlorine	0.15	4,000 ppm
ARSENIC	0.001	5 ppm
CADMIUM	0.79	2 ppm
CHROMIUM (total)	2.93	10 ppm
LEAD	98.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil meets the required specifications for "used oil".

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE June 21, 1988

SAMPLE SUBMITTED: May 25, 1988

RESULTS REPORTED: June 21, 1988

Daves Waste Oil

PARAMETER	RESULT	SPEC.
Flash Point	120 F. *	140 F. or Greater
% Chlorine	0.15	4,000 ppm
ARSENIC	0.001	5 ppm
CADMIUM	1.38	2 ppm
CHROMIUM (total)	0.68	10 ppm
LEAD	135.0	100 ppm

\*Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

The flash point is below acceptable limits, and this oil would not qualify as used oil under current definitions of used oil. Suggest monitoring this stream and instructing the supplier that his product does not meet federal or state requirements for "used oil".

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE August 4, 1988

SAMPLE SUBMITTED: August 20, 1988

RESULTS REPORTED: August 1, 1988

Special Sulfur determination for Frank Brothers

PARAMETER	RESULT	SPEC.
Flash Point		140 F. or Greater
% Chlorine		4,000 ppm
ARSENIC		5 ppm
CADMIUM		2 ppm
CHROMIUM (total)		10 ppm
LEAD		100 ppm
Sulfur	Less than 0.2 %	

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

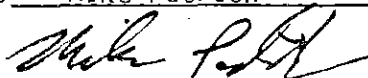
All three samples of retained loads shipped to Frank Brothers as fuel

tested at less than 0.2 % Sulfur content. This is well below their

0.44 % requirement.

Independent Sampling and Services:

By Mike Petrich



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE September 27, 1988

SAMPLE SUBMITTED: September 15, 1988

RESULTS REPORTED: September 27, 1988

*TANK #9*

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	0.17	4,000 ppm
ARSENIC	0.001	5 ppm
CADMIUM	1.59	2 ppm
CHROMIUM (total)	0.004	10 ppm
LEAD	95.1	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil is within the prescribed parameters for "used oil" as outlined in:

Subpart E. part 266 40 CFR.

Independent Sampling and Services:

By   
Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE November 23, 1988

SAMPLE SUBMITTED: October 28, 1988

RESULTS REPORTED: November 23, 1988

House Stock, Custom Blended Oils Inc.

PARAMETER	RESULT	SPEC.
Flash Point	142 F.	140 F. or Greater
% Chlorine	0.02 %	4,000 ppm
ARSENIC	0.1 ppm	5 ppm
CADMIUM	1.31 ppm	2 ppm
CHROMIUM (total)	0.004 ppm	10 ppm
LEAD	122.0 ppm *	100 ppm

\* Exceeds current standard for "Used Oil"

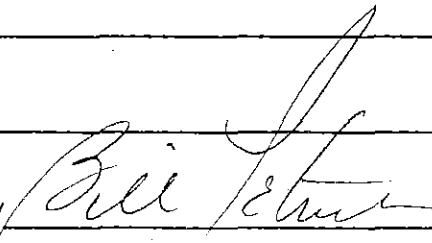
DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

Lead concentration is just slightly high, but reflects the trend downward of  
crankcase oil. Suggest blending with other stocks to achieve "used oil"  
compliance.

Independent Sampling and Services:

By



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE November 23, 1988

SAMPLE SUBMITTED: October 28, 1988

RESULTS REPORTED: November 23, 1988

Southwest Waste Oil, Submitted by Custom Blended Oils Inc.

PARAMETER	RESULT	SPEC.
Flash Point	174 F.	140 F. or Greater
% Chlorine	0.18%	4,000 ppm
ARSENIC	0.30 ppm	5 ppm
CADMIUM	2.21 ppm *	2 ppm
CHROMIUM (total)	0.004 ppm	10 ppm
LEAD	90.8 ppm	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

Slight overage on the Cadmium concentration, otherwise this oil is well within the specifications for "used oil".

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE November 23, 1988

SAMPLE SUBMITTED: Oct. 28, 1988

RESULTS REPORTED: Nov. 23, 1988

R. & S. Waste Oil, Submitted by Custom Blended Oils Inc.

PARAMETER	RESULT	SPEC.
Flash Point	132 F. *	140 F. or Greater
% Chlorine	0.21 %	4,000 ppm
ARSENIC	0.2 ppm	5 ppm
CADMIUM	1.48 ppm	2 ppm
CHROMIUM (total)	0.004 ppm	10 ppm
LEAD	103.0 ppm *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

The Flash Point of this sample is somewhat low, however even trace quantities of aliphatic, and/or aromatic hydrocarbons could create this situation.  
Lead is also just over the limit proscribed by the E.P.A. specifications.

Independent Sampling and Services:

By Bill Etnier



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE November 23, 1988

SAMPLE SUBMITTED: October 28, 1988

RESULTS REPORTED: November 23, 1988

Jerry Remer, Waste Oil, Submitted by Custom Blended Oils Inc.

PARAMETER	RESULT	SPEC.
Flash Point	200 F.	140 F. or Greater
% Chlorine	0.04 %	4,000 ppm
ARSENIC	0.1 ppm	5 ppm
CADMIUM	2.16 ppm *	2 ppm
CHROMIUM (total)	0.004 ppm	10 ppm
LEAD	80.9 ppm	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

## COMMENTS:

This oil shows just a slight increase in the Cadmium concentration. The  
other parameters reflect a "used oil" characteristic.

Independent Sampling and Services:

By Bill Etnier



# COMMERCIAL TESTING & ENGINEERING CO.

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Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.D. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 331-2900  
TELEX: 285950 COMTECO SH UR  
FAX: (312) 333-3060

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

December 21, 1988

ATTN: Ron Winkle

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Sample I.D.: New Blend  
200-400

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 12/16/88

Analysis report no. 71-67802

## Gravity At:

Specific at 60/60°F .....	0.9659
Lb per gal. at 60°F .....	8.044
°API .....	15.0

## Heating Value:

Btu/lb. ....	18,191
Btu/gal. at 60°F .....	146,328

Sulfur Content ..... 1.98 % By Weight

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, South Holland Laboratory

Original Copy Watermarked  
For Your Protection



# COMMERCIAL TESTING & ENGINEERING CO.

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PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 100  
SOUTH HOLLAND, ILL. 60486  
TELEPHONE: (312) 953-9300  
TELEX: 285950 COMTECO  
FAX: (312) 953-9300

► CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

December 23, 1988

ATTN: Larry Winkle

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Sample I.D.: New Blend  
100-500

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 12/22/88

Analysis report no. 71-68053

## Gravity At:

Specific at 60/60°F .....	0.9646
Lb per gal. at 60°F .....	8.033
°API .....	15.2

## Heating value:

Btu/lb. ....	18,308
Btu/gal. at 60°F .....	147,068

Sulfur content ..... 1.74 % By Weight

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

Original Copy Watermarked  
For Your Protection

F-464 DES/ds

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

# INDEPENDENT SAMPLING AND SERVICES, INC

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Tank 10

DATE 1/4/1988

SAMPLE SUBMITTED: 12/6/1988

RES. REPORTED: 12/30/1988

SOURCE: \_\_\_\_\_

PARAMETER	RESULT	SPECIFICATION
Flash Point	196° F	140 F. or Great
% Chlorine	1.90	4,000 ppm
ARSENIC	Less than 0.03	5.0 ppm
CADMIUM	1.55	2.0 ppm
CHROMIUM (total)	Less than 0.004	10.0 ppm
LEAD	86.4	100.0 ppm

\* Exceeds current standards for "Used Oil"

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Independent Sampling and Services Inc.

By *Mike Roth*

# INDEPENDENT SAMPLING AND SERVICES, INC.

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R&S Waste oil

DATE 1/4/1989

SAMPLE SUBMITTED: 12/6/1988

RESULTS REPORTED: 12/30/1988

SOURCE: \_\_\_\_\_

PARAMETER	RESULT		SPECIFICATION
Flash Point		154° F	140 F. or Greater
% Chlorine		0.70	4,000 ppm
ARSENIC		0.10	5.0 ppm
CADMIUM		2.13 *	2.0 ppm
CHROMIUM (total)	Less than	0.004	10.0 ppm
LEAD		83.4	100.0 ppm

\* Exceeds current standards for "Used Oil"

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Independent Sampling and Services Inc.

By 

# INDEPENDENT SAMPLING AND SERVICES, INC.

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Illinois Recovery

DATE 1/4/1989

SAMPLE SUBMITTED: 12/6/1988

RESULTS REPORTED: 12/30/1988

SOURCE: \_\_\_\_\_

PARAMETER	RESULT		SPECIFICATION
Flash Point		194° F	140 F. or Greater
% Chlorine		0.19	4,000 ppm
ARSENIC		0.06	5.0 ppm
CADMIUM		1.81	2.0 ppm
CHROMIUM (total)	Less than	0.004	10.0 ppm
LEAD		93.7	100.0 ppm

\* Exceeds current standards for "Used Oil"

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Independent Sampling and Services Inc.

By

*M. K. Patch*

RECEIVED

MAR 20 1989

OFFICE OF RCRA  
Waste Management Division  
U.S. EPA, REGION V

January 5, 1987

Custom Blended Oils Inc.  
P.O. Box 41  
Peotone Illinois 60468

ATTN: Mr. David Wheeland

*Knox College  
Northridge Oil*

RE: Analysis of Blended  
Stock, #5 Oil.

Dear Mr. Wheeland,

We are pleased to submit the following analytical information relative to the sample we picked-up of the subject oil.

The analytical work was delayed due to the rush of work prior to the holidays, and we apologize for any inconvenience that this may have caused you.

The parameters and results are listed as follows:

PARAMETER	RESULT
B.T.U. per lb.	18,973
% Sulfur	0.59%
% Chlorine	0.20%
Flash Point, Pensky Martens,	200 F. +
Bottom Sediment and Water	Less than 1%
Metals:	
Arsenic	.04 ppm
Chromium Total	3.55 ppm
Cadmium	1.78 ppm
Lead	298.00 ppm
Ash	0.78 %
Viscosity SUS @ 100 F.	297 sec

The results from samples 61 through 63 reflecting the properties of the received oils will be forthcoming.

Thank you for your patience in this matter.

*Bill Petrich*  
Bill Petrich  
Independent Sampling & Svc.

*January  
1987*

*Through*

*December  
1987*



# COMMERCIAL TESTING & ENGINEERING CO.

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PLEASE ADDRESS ALL CORRESPONDENCE  
16130 VAN DRUNEN RD., P.O. BOX  
SOUTH HOLLAND, IL 60486  
TELEPHONE: (312) 264-1111  
TELEX: 285950 COMTECO SI

CUSTOM BLENDED OILS, INC.  
P.O. Box #41  
Peotone, IL 60468

January 12, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample #5 Oil  
reported to us

#5 Oil  
1/5/87

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 1/6/87

Analysis report no. 71-32255 Arsenic To Follow

Ash Content .....	0.43 % by weight
Flash Point, Pensky-Martens .....	184°F
Gravity:	
Specific at 60/60°F .....	0.9279
Lbs./gallon at 60°F .....	7.727
°API .....	21.0
Heating value:	
Btu/lb. ....	18,300
Btu/gal. at 60°F .....	141,404
Sulfur Content, Bomb Method .....	0.65 % by weight
Viscosity at:	
100°F Saybolt Universal .....	476 seconds
100°F Kinematic .....	102.7 centistokes
Lead, Pb .....	154 ppm, as rec'd
Cadmium, Cd .....	1.24 ppm, as rec'd
Chromium, Cr .....	0.58 ppm, as rec'd
Halogens .....	451 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

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DWC/ds

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
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Charter Member





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SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS, INC.  
P.O. Box #41  
Peotone, IL 60468

January 12, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample #5 Oil  
reported to us

#5 Oil  
1/5/87

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 1/6/87

Analysis report no. 71-32255 Arsenic To Follow

Ash Content .....	0.43 % by weight
Flash Point, Pensky-Martens .....	184°F
Gravity:	
Specific at 60/60°F .....	0.9279
Lbs./gallon at 60°F .....	7.727
°API .....	21.0
Heating value:	
Btu/lb. ....	18,300
Btu/gal. at 60°F .....	141,404
Sulfur Content, Bomb Method .....	0.65 % by weight
Viscosity at:	
100°F Saybolt Universal .....	476 seconds
100°F Kinematic .....	102.7 centistokes
Lead, Pb .....	154 ppm, as rec'd
Cadmium, Cd .....	1.24 ppm, as rec'd
Chromium, Cr .....	0.58 ppm, as rec'd
Halogens .....	451 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. E.*

Manager, South Holland Laboratory



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SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS, INC.  
P.O. Box #41  
Peotone, IL 60468

January 12, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample #6 Oil  
reported to us

#6 Oil  
1/5/87

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 1/6/87

Analysis report no. 71-32256

Ash Content .....	0.13 % by weight
Heating value:	
Btu/lb. ....	18,135
Sulfur Content, Bomb Method .....	0.91 % by weight
Lead, Pb .....	20.4 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. C.*

Manager, South Holland Laboratory



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2  
SAMPLE SOURCE: #5 OIL, CUSTOM BLENDED OILS INC.

SAMPLE SUBMITTED: JANUARY 6, 1987

RESULTS SUBMITTED: JANUARY 15, 1987

11/27/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: 200 F.	140 F.
% Chlorides	: 0.05%	4,000 ppm — 500
Arsenic	: NOT RUN	5 ppm
Cadmium	: 1.12 PPM	2 ppm
Chromium (total)	: 0.284 PPM	10 ppm
Lead	: 32.60 PPM	100 ppm —

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f: 455 SECS.

SULFUR CONTENT: 0.76%

ASPH. CONTENT: 0.75%

A.P.I. GRAVITY: 21.1 @ 60 f. ✓

W. PER LB.: 18,203

D.S. & W : NOT RUN %

Independent Sampling and Services;

  
BY: BILL PETRICH

TESTS - FROM - 4 - 2 BLEED  
HOSE - WITH - #6 FROM - DRAWN  
OUT - OF - ALLIED.

# #5-Oil BLEND. LAB. RESULTS

4-2-Mix.

1/13/86

PETRICHT

## COMM. TESTING

	- 21.1	21
(SVS-100°)	- 455	476
	- 200°F	184°
	- 0.75	0.43
R	- 0.76	0.65
AL 18,203	- 140,564	18,300 - 141,404
C	-	
PM	- 1.12	1.24 PPM
		0.58 " "
PM	- 0.28	0.58 " "
DE	LESS THAN - 500	451 " "
	32.6	154 " "



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16130 VAN DRUNEN RD., E.  
SOUTH HOLLAND, ILL. 60486  
TELEPHONE: (312) 953-9300  
TELEX: 285950 COMTECH

CUSTOM BLENDED OILS, INC.  
P.O. Box #41  
Peotone, IL 60468

January 27, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample #5 Oil  
reported to us

#5 Oil  
1/5/87

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 1/6/87

Analysis report no. 71-32255 Complete Results

Arsenic, As ..... 0.04 ppm, as rec'd

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F-464

SLK/ds

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES



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TELEPHONE: (312) 264-1173  
TELEX: 285950 CDMTECO SH UR

CUSTOM BLENDED OILS, INC.  
P.O. Box #41  
Peotone, IL 60468

January 27, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample #5 Oil  
reported to us

#5 Oil  
1/5/87

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 1/6/87

Analysis report no. 71-32255 Complete Results

Arsenic, As ..... 0.04 ppm, as rec'd

Original Copy Watermarked  
For Your Protection

F-464

SLK/ds

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES



Charter Member



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

3312900

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS. INC.  
P.O. Box #41  
Peotone, IL 60468

March 24, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

821-4747

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 3/3/87

Analysis report no. 71-34960

Ash Content ..... 1.24 % by wt.  
Flash Point, Pensky-Martens .... 128°F  
Sulfur Content, Bomb Method .... 0.34 % by wt.  
Arsenic, As ..... 1.0 ppm, as rec'd  
Lead, Pb ..... 57.0 ppm, as rec'd  
Cadmium, Cd ..... 0.6 ppm, as rec'd  
Chromium, Cr ..... 3.6 ppm, as rec'd  
Total Halogens ..... 5609 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



Charter Member

Final Copy Watermarked  
For Your Protection

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

SLK/ds



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS. INC.  
P.O. Box #41  
Peotone, IL 60468

March 24, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

821-4747

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 3/3/87

Analysis report no. 71-34960

Ash Content ..... 1.24 % by wt.  
Flash Point, Pensky-Martens ..... 128°F  
Sulfur Content, Bomb Method ..... 0.34 % by wt.  
Arsenic, As ..... 1.0 ppm, as rec'd  
Lead, Pb ..... 57.0 ppm, as rec'd  
Cadmium, Cd ..... 0.6 ppm, as rec'd  
Chromium, Cr ..... 3.6 ppm, as rec'd  
Total Halogens ..... 5609 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



Charter Member

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For Your Protection

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

SLK/ds



SAMPLE SOURCE: E&L Tank Cleaners

SAMPLE SUBMITTED: 2/2/87

RESULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: >200 F	140 F.
% Chlorides	: <0.05	4,000 ppm
Arsenic	: <0.001	5 ppm
Cadmium	: 1.07	2 ppm
Chromium (total)	: 0.250	10 ppm
Lead	: 300.0 *	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

A.P.I. GRAVITY: @ 60 f.

1 .U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

BY: Daniel Petrich

SAMPLE SOURCE: R&S Waste Oil

SAMPLE SUBMITTED: 2/2/87

RESULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: >200 F	140 F.
% Chlorides	: <0.05	4,000 ppm
Arsenic	: <0.001	5 ppm
Cadmium	: 0.68	2 ppm
Chromium (total)	: <0.010	10 ppm
Lead	: 535 *	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

A.P.I. GRAVITY: @ 60 f.

U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

BY: Daniel Petrich

MPLE SOURCE: E&L Tank Cleaners

MPLE SUBMITTED: 2/2/87

SULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
ash Point	: >200 F	140 F.
Chlorides	: <0.05	4,000 ppm
senic	: <0.001	5 ppm
dmium	: 1.07	2 ppm
omium (total)	: 0.250	10 ppm
ad	: 300.0 *	100 ppm

exceeds current standard for "Used Oil":

TA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

SCOSITY SUS @ 100 f:

\_FUR CONTENT:

4 CONTENT:

A.I. GRAVITY: @ 60 f.

.U. PER LB.:

S. & W : %

dependent Sampling and Services;

BY: Daniel Petrich

RECEIVED

APR 20 1987

IEPA-DLPC

( MPLE SOURCE: H&S Waste Oil

MPLE SUBMITTED: 2/2/87

SULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
ash Point	: 1200 F	140 F.
Chlorides	: (0.05	4,000 ppm
senic	: (0.001	5 ppm
admium	: 0.68	2 ppm
romium (total)	: (0.010	10 ppm
ad	: 535 *	100 ppm

xceeds current standard for "Used Oil";

TA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

SCOSITY SUS @ 100 f:

LFUR CONTENT:

H CONTENT:

SP. I. GRAVITY: @ 60 f.

U. PER LB.:

S. & W : %

dependent Sampling and Services;

BY: Daniel Petrich

RECEIVED

APR 20 1987

IEPA-003

MPLE SOURCE: Ill Recovery Co.

MPLE SUBMITTED: 2/2/87

SULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
ash Point	: >200 F	140 F.
Chlorides	: <0.05	4,000 ppm
benic	: 0.211	5 ppm
dmium	: 0.55	2 ppm
romium (total)	: <0.01	10 ppm
ad	: 272 *	100 ppm

exceeds current standard for "Used Oil":

TA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

SCISSITY SUS @ 100 f:

LFUR CONTENT:

4 CONTENT:

P.I. GRAVITY: @ 60 f.

U. PER LB.:

S. & W : %

dependent Sampling and Services;

BY: Daniel Patrich

RECEIVED

APR 20

DEPT. OF ENVIRONMENTAL PROTECTION

SAMPLE SUBMITTED: 2/2/87

SOURCE SUBMITTED: 2/2/87

PARAMETER:	RESULT:	SPILL:
ash Point	: 129 F	140 F
Chlorides	: 10.05	4,000 ppm
benic	: 0.001	5 ppm
odium	: 1.5%	2 ppm
romium (total)	: 0.609	10 ppm
ad	: 417	100 ppm

exceeds current standard for "Used Oil":

THE RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

SCOBITY SUS @ 100 F:

LFUR CONTENT:

H CONTENT:

P.I. GRAVITY: @ 60 F.

.U. PER LB.:

S. & W: %

dependent Sampling and Services;

By: Daniel Petrich

RECEIVED  
APR 20 1987  
IEPA-DLPC

SAMPLE SOURCE: Atlas Oil Co.

SAMPLE SUBMITTED: 2/2/87

RESULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: 129 F *	140 F.
% Chlorides	: <0.05	4,000 ppm
Arsenic	: <0.001	5 ppm
Cadmium	: 1.91	2 ppm
Chromium (total)	: 0.609	10 ppm
Lead	: 417	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

A.P.I. GRAVITY: @ 60 f.

U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

BY: Daniel Petrich

SAMPLE SOURCE: I11 Recovery Co.

SAMPLE SUBMITTED: 2/2/87

RESULTS SUBMITTED: 2/5/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: >200 F	140 F.
% Chlorides	: <0.05	4,000 ppm
Arsenic	: 0.211	5 ppm
Cadmium	: 0.95	2 ppm
Chromium (total)	: <0.01	10 ppm
Lead	: 272 *	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

A.P.I. GRAVITY: @ 60 f.

( ) U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

BY: Daniel Petrich





P. O. BOX 129  
ARGO, ILLINOIS 60501

VESSEL/TANK(S):

INVOICE NO: (ID) 7964

CUSTOMER REF. NO.: \_\_\_\_\_  
DATE: April 3, 1987

Sample designated as:  
Fuel Oil

Super Oil

**Identifying Marks:  
Submitted Sample**

Submitted by:  
Custom Blended Oils

Client:

Custom Blended Oils, Inc.

NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of E. W. Saybolt & Co., Inc.
- Results were based on analysis made at the time samples were received at the laboratory.
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Sample nomenclature is designated by the customer.

## ANALYSIS

Gross BTU's/gallon ASTM D-240

143,952

MEMBERS ASTM - API - BAE

7. LAB-200 (7/84)-2

**E. W. SAYBOLT & CO., INC**

OFFICE ARGO

CUSTOMER REF. NO. \_\_\_\_\_

DATE: April 3, 1987

VESSEL/TANK(S): \_\_\_\_\_

LABORATORY NO.: 3138

INVOICE NO.: (ID) 7964

**DESCRIPTION**

Sample designated as:  
Fuel Oil

Identifying Marks:  
Submitted Sample

Submitted by:

Custom Blended Oils

Client:

Custom Blended Oils, Inc.

**NOTES**

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of E. W. Saybolt & Co., Inc.
- Results were based on analysis made at the time samples were received at the laboratory.
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Sample nomenclature is designated by the customer.

**ANALYSIS**

Gross BTU'S/gallon ASTM D-240

143,952

MEMBERS ASTM - API - SAE

*R. J. Simmons*

OFFICE ARGO

CUSTOMER REF. NO.: \_\_\_\_\_

DATE: April 3, 1987

VESSEL/TANK(S): S/T 5-17

LABORATORY NO.: 3135

INVOICE NO.: (ID) 7963

DESCRIPTION

Sample designated as:  
Decanted Oil

Identifying Marks:  
S/T 5-17 @ GATX-Bedford  
Park, IL on 4/3/87

Submitted by:  
E.W. Saybolt & Co., Inc.

Client:  
Ameropan Oil/Custom  
Blended Oils

NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of E. W. Saybolt & Co., Inc.
- Results were based on analysis made at the time samples were received at the laboratory.
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Sample nomenclature is designated by the customer.

ANALYSIS

Gravity API @ 60°F ASTM D-287  
Sulphur & Wt. ASTM D-1552  
Flash PM ASTM D-93  
S & W % ASTM D-1796  
Vis. SFS @ 122°F ASTM D-88  
Pour Point ASTM D-97  
Gross BTU'S/gallon

-3.2  
3.89%  
195°F  
0.1%  
40.2 sec.  
40°F  
160,498

MEMBERS ASTM - API - SAE

*R. H. Zimmerman*

E. W. SAYBOLT & CO., INC.



# COMMERCIAL TESTING & ENGINEERING CO.

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Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL

16130 VAN DYKE

ST.

TELEPHONE

TELEX: 251111

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

April 10, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Oil Sample  
5-14

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 4/9/87

Analysis report no. 71-36952

## Gravity:

Specific at 60/60°F .....	0.9692
Lb per gal. at 60°F .....	8.071
°API .....	14.5

## Heating value:

Btu/lb. ....	17,858
Btu/gal. at 60°F .....	144,136

Sulfur Content ..... 1.64 % by weight

Water by distillation ..... 2.57 % by volume

Lead, Pb ..... 124.7 ppm, as rec'd

Total Halogens ..... 621.8 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Ely*

Manager, South Holland Laboratory

Original Copy Watermarked  
For Your Protection

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

F-464 SLK/ds

SAMPLE SOURCE: R&S Waste Oil

SAMPLE SUBMITTED: 3/23/87

RESULTS SUBMITTED: 4/13/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: 120 F	140 F.
% Chlorides	: <0.1	4,000 ppm
Arsenic	: <0.1	5 ppm
Cadmium	: 2.68*	2 ppm
Chromium (total)	: <0.01	10 ppm
Lead	: 508*	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

P. I. GRAVITY: @ 60 f.

T. U. PER LB.:

B. S. & W : %

Independent Sampling and Services;

  
BY: Daniel Petrich

SAMPLE SOURCE: Atlas

SAMPLE SUBMITTED: 3/23/87

RESULTS SUBMITTED: 4/13/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: >200 F	140 F.
% Chlorides	: <0.1	4,000 ppm
Arsenic	: <0.1	5 ppm
Cadmium	: 2.90*	2 ppm
Chromium (total)	: <0.01	10 ppm
Lead	: 326*	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

P.I. GRAVITY: @ 60 f.

T.U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

  
BY: Daniel Petrich

SAMPLE SOURCE: EXL Tank Cleaners

SAMPLE SUBMITTED: 3/23/87

RESULTS SUBMITTED: 4/13/87

PARAMETER:	RESULT:	SPEC:
Flash Point	: >200 F	140 F.
% Chlorides	: 0.15	4,000 ppm
Arsenic	: <0.1	5 ppm
Cadmium	: 1.66	2 ppm
Chromium (total)	: <0.01	10 ppm
Lead	: 166*	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

P. I. GRAVITY: @ 60 f.

T. U. PER LB.:

B. S. & W : %

Independent Sampling and Services:



BY: Daniel Petrich

SAMPLE SOURCE: ILL Rec.

SAMPLE SUBMITTED: 3/23/87

RESULTS SUBMITTED: 4/13/87

PARAMETER;	RESULT;	SPEC;
Flash Point	: 155 F	140 F.
% Chlorides	: 0.27	4,000 ppm
Arsenic	: <0.1	5 ppm
Cadmium	: 3.24*	2 ppm
Chromium (total)	: <0.01	10 ppm
Lead	: 483*	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED:

VISCOSITY SUS @ 100 f:

SULFUR CONTENT:

ASH CONTENT:

P.P.I. GRAVITY: @ 60 f.

T.U. PER LB.:

B.S. & W : %

Independent Sampling and Services;

  
BY: Daniel Petrich





# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

NCE 1908

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 1  
SOUTH HOLLAND, IL 60480  
TELEPHONE: (312) 264-1111  
TELEX: 285950 COMTECO SH

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

April 16, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Code House

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 4/16/87

Analysis report no. 71-37207

## Gravity:

Specific at 60/60°F .....	0.8984
Lb per gal. at 60°F .....	7.481
°API .....	26.0

## Heating value:

Btu/lb. ....	18,190
Btu/gal. at 60°F .....	136,079

Sulfur Content ..... 0.55 % by weight

Water by distillation ..... 4.40 % by volume

Original Copy Watermarked  
For Your Protection

F-464 SLK/ds

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David F. Wheeland*  
Manager, South Holland Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES



Charter Member



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INCE 1908

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN AVE.  
SOUTH HAVEN, CT 06488  
TELEPHONE: (203) 348-1111  
TELEX: 28594

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

April 16, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils

Kind of sample  
reported to us Oil

Code House

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 4/16/87

Analysis report no. 71-37207

## Gravity:

Specific at 60/60°F .....	0.8984
Lb per gal. at 60°F .....	7.481
°API .....	26.0

## Heating value:

Btu/lb. ....	18,190
Btu/gal. at 60°F .....	136,079

Sulfur Content ..... 0.55 % by weight

Water by distillation ..... 4.40 % by volume

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

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For Your Protection

F-464 SLK/ds

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES



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SINCE 1908

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PLEASE ADDRESS ALL CORRESPONDENCE  
16130 VAN DRUNEN RD., P.O. BOX  
SOUTH HOLLAND, IL 60486  
TELEPHONE: (312) 264-1111  
TELEX: 285950 COMTECO SH

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

April 16, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Code 2-4  
5-14

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 4/14/87

Analysis report no. 71-36093

## Gravity:

Specific at 60/60°F .....	0.8805
Lb per gal. at 60°F .....	7.332
°API .....	29.2 ~

## Heating value:

Btu/lb. ....	18,996
Btu/gal. at 60°F .....	139,281

## Viscosity At:

100°F Saybolt Universal .....	88.3 seconds
100°F Kinematic .....	17.7 centistokes

Lead, Pb ..... 175.1 ppm, as rec'd

Total Halogens ..... 542.1 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory

Original Copy Watermarked  
For Your Protection

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

F-464 SLK/ds



Charter Member



# COMMERCIAL TESTING & ENGINEERING CO.

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Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

April 16, 1987

ATTN: David F. Wheeland

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us Oil

Code 1-S  
5-14

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 4/14/87

Analysis report no. 71-36092

## Gravity:

Specific at 60/60°F .....	0.8871
Lb per gal. at 60°F .....	7.387
°API .....	28.0

## Heating value:

Btu/lb. ....	18,798
Btu/gal. at 60°F .....	138,859

## Viscosity At:

100°F Saybolt Universal .....	250.0 seconds
100°F Kinematic .....	53.9 centistokes

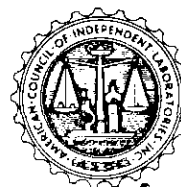
Lead, Pb ..... 208.6 ppm, as rec'd

Total Halogens ..... 740.6 ppm, as rec'd

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*

Manager, South Holland Laboratory



Charter Member

Original Copy Watermarked  
For Your Protection

F-464 SLX/ds

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

[illegible]

132  
 133  
 134  
 135  
 136  
 137

**THE**  
**WORLD**  
**OF**  
**THE**  
**FUTURE**

[illegible]

10

2005	6/15/87
100	10-887

CONTAINER No. ID No.:	3983-7
REMARKS: Atlas	
ALL MATERIALS: none	
ALL ANIMALS: none	
ALL PLANTS: none	
PARAMETERS:	
Temperature	>200°F
Calorific	0.210
Arson	<.003
Total Carbonium	5.41
1100	748.0
11000	3.05

100

5/15/87

208-67

2980-7

**INDEX**

100-44362-1066  
100-44362-1067

[illegible][illegible]

2025

300.

RECEIVED  
JAN 10 1967

U.S. DEPARTMENT OF AGRICULTURE  
WASHINGTON, D.C.

100

82



PLEASE ADDRESS ALL CORRESPONDENCE TO:  
 16130 VAN DRAUEN RD., P.O. BOX 127  
 SOUTH HOLLAND, IL 60473  
 TELEPHONE: (312) 264-1173  
 TELEX: 285950 COMTECO SH UR

July 21, 1987

Sample identification  
 by Custom Blended Oils, Inc.

Sample - #4 - Hopedale

CUSTOM BLENDED OILS, INC.  
 P.O. Box 1041  
 Peotone, IL 60468  
 ATTN: David F. Wheeland

Kind of sample  
 reported to us

Sample taken at

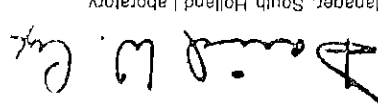
Sample taken by Custom Blended Oils, Inc.

Date sampled

Date received 7/20/87

Gravity:  
 Specific at 60/60°F ..... 0.8956  
 Lb per gal. at 60°F ..... 7.457  
 °API ..... 26.5  
 Heating value:  
 Btu/lb. .... 19,064  
 Btu/gal. at 60°F ..... 142,159

Analysis report no. 71-40949

Respectfully submitted,  
  
 COMMERCIAL TESTING & ENGINEERING CO.  
 Manager, South Holland Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
 TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

Charter Member



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SLK/ds

464

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES  
Manager, South Holland Laboratory  
COMMERCIAL TESTING & ENGINEERING CO.  
Respectfully submitted,  
J. M. Ely

Gravity: Specific at 60/60°F ..... 0.8956  
Lb per gal. at 60°F ..... 7.457  
°API ..... 26.5  
Heating value: Btu/lb. .... 19,064  
Btu/gal. at 60°F ..... 142,159  
Sulfur Content ..... 1.34 % by weight

Analysis report no. 71-40949 Revised Report

Date received 7/20/87

Date sampled -----

Sample taken by Custom Blended Oils, Inc.

Sample taken at -----

Kind of sample reported to us -----

Sample - #4 - Hopedale

ATTN: David F. Wheeland

P.O. Box 1041  
Peotone, IL 60468

CUSTOM BLENDED OILS, INC.

Sample identification

by Custom Blended Oils, Inc.

July 23, 1987

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD.,  
SOUTH HOLLAND, IL 60470  
TELEPHONE: 815/381-1100  
TELEX: 285950 COM

Member of the SGS Group (Société Générale de Surveillance)

COMMERCIAL TESTING & ENGINEERING CO.  
GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

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# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 127  
SOUTH HOLLAND, IL 60473  
TELEPHONE: (312) 264-1173  
TELEX: 285950 COMTECO SH UR

July 27, 1987

Sample identification  
by Custom Blended Oils, Inc.

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

ATTN: David F. Wheeland

Kind of sample reported to us -----  
Sample taken at -----  
Sample taken by Custom Blended Oils, Inc. -----  
Date sampled -----  
Date received 7/20/87

Analysis report no. 71-40948

Ash Content ..... 1.73 % by weight  
Flash point, Pensky-Martens ..... 185°F

Gravity:  
Specific at 60/60°F ..... 0.9047  
Lb. per gal. at 60°F ..... 7.534  
API ..... 24.9

Heating value:  
Btu/lb. .... 18,727  
Btu/gal. at 60°F ..... 141,089

Sulfur Content ..... 1.12 % by weight  
Lead, Pb ..... 51.4 ppm, as rec'd  
Cadmium, Cd ..... 0.7 ppm, as rec'd  
Chromium, Cr ..... 17.9 ppm, as rec'd  
Arsenic, As ..... <.2 ppm, as rec'd  
Total Halogens ..... 1,618.8 ppm

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.  
*James W. G.*

Manager, South Holland Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

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For Your Protection

F-464 DWG/ds



Charter Member

1150 Junction Avenue - Schererville, Indiana 46375

1-219-322-2560 ● 1-800-428-3311

Date: 8/5/87

Bill Petrich  
Independent Sampling  
1551 West 187th St.  
Homewood, IL 60430

**Recd:** 7/29/87

UO #: 19-1148

[illegible]

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-638

RESULTS OF ANALYSIS: E & L

DATE 9/4/87

SAMPLE SUBMITTED: 8/7/87

RESULTS REPORTED: 8/25/87

PARAMETER	RESULT	SPEC
Flash Point	170 F	140 F. or Greater
% Chlorine	1.87 *	4,000 ppm
ARSENIC	0.4	5 ppm
CADMIUM	2.22 *	2 ppm
CHROMIUM (total)	4.77	10 ppm
LEAD	206 *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Dennis A. Fetters

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R & S

DATE 9/4/87

SAMPLE SUBMITTED: 8/7/87

RESULTS REPORTED: 8/25/87

PARAMETER	RESULT	SPEC.
Flash Point	180 F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.4	5 ppm
CADMIUM	1.37	2 ppm
CHROMIUM (total)	21.7 *	10 ppm
LEAD	68.2	100 ppm

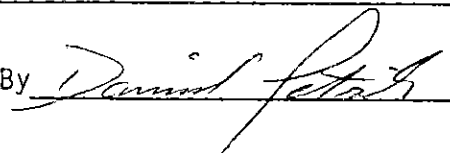
\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: EBO Ader

DATE 9/4/87

SAMPLE SUBMITTED: 8/7/87

RESULTS REPORTED: 8/25/87

PARAMETER	RESULT	SPEC.
Flash Point	200 F	140 F. or Greater
% Chlorine	0.29	4,000 ppm
ARSENIC	0.4	5 ppm
CADMIUM	0.201	2 ppm
CHROMIUM (total)	1.80	10 ppm
LEAD	17.4	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By 

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: ILL Rec.

DATE 9/4/87

SAMPLE SUBMITTED: 8/7/87

RESULTS REPORTED: 8/25/87

PARAMETER	RESULT	SPEC.
Flash Point	200 F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.4	5 ppm
CADMIUM	1.37	2 ppm
CHROMIUM (total)	1.10	10 ppm
LEAD	104 *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By *Daniel J. Smith*



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Atlas

DATE 9/4/87

SAMPLE SUBMITTED: B/7/87

RESULTS REPORTED: 8/25/87

PARAMETER	RESULT	SPEC.
Flash Point	200 F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.4	5 ppm
CADMIUM	1.84	2 ppm
CHROMIUM (total)	0.962	10 ppm
LEAD	145 *	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Daniel J. Felt



SINCE 1908

# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD.,  
SOUTH HOLLAND, ILLINOIS 60486  
TELEPHONE: (312) 953-9300  
TELEX: 285950 COMTECH

► CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

September 8, 1987

Sample identification  
by Custom Blended Oils,

Kind of sample  
reported to us -----

House Stock #1

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 9/2/87

Analysis report no. 71-43306

Sulfur Content ..... 0.45 % By Weight

Original Copy Watermarked  
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F-464 DWC/ds

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, South Holland Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD  
SOUTH HOLLAND, IL 60486  
TELEPHONE: (312) 953-9300  
TELEX: 285950 CTE

► CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

September 8, 1987

Sample identification  
by Custom Blended Oils,

Kind of sample  
reported to us -----

House Stock #2

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 9/2/87

Analysis report no. 71-43307

Sulfur Content ..... 0.56 % By Weight

Original Copy Watermarked  
For Your Protection

F-464 DWC/ds

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. C.*

Manager, South Holland Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: R&S Waste oil

DATE 11/16/87

SAMPLE SUBMITTED: 11/1/87

RESULTS REPORTED: 11/16/87

PARAMETER	RESULT	SPEC.
Flash Point	145 F.	140 F. or Greater
% Chlorine	0.09	4,000 ppm
ARSENIC	Less than 0.03	5 ppm
CADMIUM	0.538	2 ppm
CHROMIUM (total)	Less than 0.01	10 ppm
LEAD	24.1	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By

Daniel F. Fitch

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Atlas

DATE 11/16/87

SAMPLE SUBMITTED: 11/1/B7

RESULTS REPORTED: 11/16/87

PARAMETER	RESULT	SPEC.
Flash Point →	*110 F.	140 F. or Greater
5% Chlorine	0.18	4,000 ppm
ARSENIC	Less than 0.03	5 ppm
CADMIUM	0.865	2 ppm
CHROMIUM (total)	Less than .01	10 ppm
LEAD	84.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By

Daniel Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: CBD Ford 1D/30

DATE 11/16/87

SAMPLE SUBMITTED: 11/1/87

RESULTS REPORTED: 11/16/87

PARAMETER	RESULT	SPEC.
Flash Point	170 F.	140 F. or Greater
% Chlorine	0.26	4,000 ppm
ARSENIC	Less than .03	5 ppm
CADMIUM	0.374	2 ppm
CHROMIUM (total)	Less than .01	10 ppm
LEAD	13.4	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By *Thomas J. Petuk*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: CBO Greenfield

DATE 11/16/87

SAMPLE SUBMITTED: 11/1/87

RESULTS REPORTED: 11/16/87

PARAMETER	RESULT	SPEC.
Flash Point	170 F.	140 F. or Greater
% Chlorine	0.26	4,000 ppm
ARSENIC	0.76	5 ppm
CADMIUM	0.57	2 ppm
CHROMIUM (total)	Less than .01	10 ppm
LEAD	27.6	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By

Daniel P. Smith

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: CBO FORD, 10/27

DATE 11/16/87

SAMPLE SUBMITTED: 10/27/87

RESULTS REPORTED: 11/16/87

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 200 F	140 F. or Greater
% Chlorine	0.09	4,000 ppm
ARSENIC	Less than .03	5 ppm
CADMIUM	0.295	2 ppm
CHROMIUM (total)	.01	10 ppm
LEAD	25.1	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By

*Daniel J. Fitch*





# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO  
16130 VAN DRUNEN RD., P.O. BOX 12  
SOUTH HOLLAND, IL 6047  
TELEPHONE: (312) 264-117  
TELEX: 285950 COMTECO SH U

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

December 10, 1987

ATTN: Ron Winkle

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us #6 Oil

Code #2,000 AX  
4,000 H

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 12/10/87

Analysis report no. 71-48113

Gravity :  
Specific at 60/60°F ..... 0.9346  
Lb per gal. at 60°F ..... 7.783  
°API ..... 19.9

Heating Value:  
Btu/lb. .... 18,402  
Btu/gal. at 60°F ..... 143,223

Sulfur Content ..... 1.03 % By Weight

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, South Holland Laboratory

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F-464

RAH/ds

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
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Charter Member



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Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
16130 VAN DRUNEN RD., P.O. BOX 1041  
SOUTH HOLLAND, ILL. 60486  
TELEPHONE: (312) 953-9300  
TELEX: 285950 COMTE

CUSTOM BLENDED OILS, INC.  
P.O. Box 1041  
Peotone, IL 60468

December 10, 1987

ATTN: Ron Winkle

Sample identification  
by Custom Blended Oils, Inc.

Kind of sample  
reported to us #6 Oil

Code #1,000 AX  
5,000 H

Sample taken at -----

Sample taken by Custom Blended Oils, Inc.

Date sampled -----

Date received 12/10/87

Analysis report no. 71-48112

## Gravity :

Specific at 60/60°F ..... 0.9106  
Lb per gal. at 60°F ..... 7.582  
°API ..... 23.9

## Heating Value:

Btu/lb. .... 18,585  
Btu/gal. at 60°F ..... 140,910

Sulfur Content ..... 0.75 % By Weight

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*David W. Cox*  
Manager, South Holland Laboratory

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F-464

RAH/ds

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

#21



Butch

we CAN ALSO

delivered To you

other Locations in

Wisconsin - depending how far North you are

\$ .30 Milwaukee \$ .31 De Forest delivered

CHICAGO LINE 312 / 821-4747

PEOTONE LINE 312 / 258-6881

P. O. BOX #41

PEOTONE, IL 60468

LITTLE ROCK!

## Quality Blended Fuel Oils

140° - F. delivered Temp.

6500 gal.

Thank you,  
Murray Jones

### INFORMATION SHEET

#### MEDIUM BURNER FUEL TYPICAL SPECIFICATIONS

##### COMPOSITION

GRAVITY (API)	25 - 28
FLASH	175 - 200°F
VISCOSITY (SUS 100°)	175 - 225
SULPHUR %	0.35 - 0.55
ASH	0.50 - 0.55
B.T.U. (PER GAL)	144,000 - 146,000
B.S.&W.	1% - 2%
ARSENIC	LESS THAN 5 PPM
CADMIUM	LESS THAN 2 PPM
CHROMIUM	LESS THAN 10 PPM
LEAD	LESS THAN 100 PPM
HALOGENS	LESS THAN 1000 PPM

This product contains recycled oil, and it follows the guidelines and requirements for the material, as contained in the Federal EPA register Volume 50 section 230 dated November 29, 1985.



Environmental, Industrial & Food Analysis since 1900

Payne & Dolan, Inc.  
P.O. Box 781  
Waukesha, WI 53187

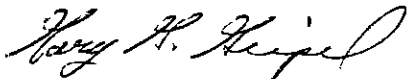
December 1, 1987  
Project #9547

Attn: Glenn Elliott

Oil Analysis

Dryer Fuel 11-13-87 Control #12

Flash Point, P-M, °F	120
Arsenic, ppm	0.7
Cadmium, ppm	1.1
Chromium, ppm	15.2
Lead, ppm	353
Total Halogens as Cl, ppm	1270
PCB's	N.D. (l.o.d. 10 ppm)

  
Gary G. Geipel  
Senior Analyst

Cr

Pb

Tox

6125 West National Avenue, P.O. Box 14513, Milwaukee, Wisconsin 53214, (414) 475-6700

• Dept. of Health State Certified Laboratory #168 • Dept. of Natural Resources State Certified Laboratory #241249360 •  
• USDA Accredited Laboratory #5581 • NIOSH Proficiency Analytical Testing Program •

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: South West Oil

DATE 11/17/86

SAMPLE SUBMITTED: 11/2/86

RESULTS REPORTED: 11/15/86

PARAMETER	RESULT	SPEC.
Flash Point	165°	140 F. or Greater
% Chlorine	.05	4,000 ppm
ARSENIC	.04	5 ppm
CADMIUM	12.6	2 ppm
CHROMIUM (total)	2.86	10 ppm
LEAD	120	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-638

RESULTS OF ANALYSIS: R & S

DATE 11/17/86

SAMPLE SUBMITTED: 11/2/86

RESULTS REPORTED: 11/15/86

PARAMETER	RESULT	SPEC
Flash Point	200°	140 F. or Greater
% Chlorine	.05	4,000 ppm
ARSENIC	.04	5 ppm
CADMIUM	1.47	2 ppm
CHROMIUM (total)	2.14	10 ppm
LEAD	148	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Atlas waste oil

DATE 11/17/86

SAMPLE SUBMITTED: 11/2/86

RESULTS REPORTED: 11/15/86

PARAMETER	RESULT	SPEC.
Flash Point	175°	140 F. or Greater
% Chlorine	0.4	4,000 ppm
ARSENIC	.04	5 ppm
CADMIUM	8.23	2 ppm
CHROMIUM (total)	4.21	10 ppm
LEAD	441	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

---

---

---

Independent Sampling and Services:

By Mike Petrich



# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: Illinois Recovery

DATE 11/17/86

SAMPLE SUBMITTED: 11/2/86

RESULTS REPORTED: 11/15/86

PARAMETER	RESULT	SPEC.
Flash Point	200°	140 F. or Greater
% Chlorine	.05	4,000 ppm
ARSENIC	.04	5 ppm
CADMIUM	1.93	2 ppm
CHROMIUM (total)	3.16	10 ppm
LEAD	238	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

---

---

---

Independent Sampling and Services:

By Mike Petrich

**BILL PETRICH**  
**Environmental Services**

P.O. Box 822  
Homewood, IL 60430  
(312) 798-6383

March 17, 1989

**RECEIVED**  
MAR 20 1989

Ms Sue Rodenbeck  
US E.P.A., RCRA  
Enforcement Branch (5HR-12)  
230 South Dearborn Street  
Chicago Illinois 60604

OFFICE OF RCRA  
Waste Management Division  
U.S. EPA, REGION V

RE: Custom Blended  
Oils Inc.

Ms Rodenbeck,

At the direction of Mr. Ernest Winkle, President of Custom Blended Oils Inc., our client, we are submitting today copies of analysis performed on "used oils" processed by Custom Blended Oils. The analyses were performed by Tenco Laboratories, of Schererville Indiana, a certified laboratory under protocols established by the E.P.A. and found in SW-846 OSW.

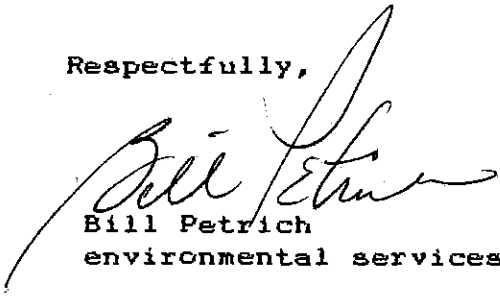
The analyses cover the period from July of 1986 to and through December of 1988. There have been no analyses performed in 1989, because of the lack of business activity this year.

Should any technical questions occur, we would be pleased to cooperate with you in answering them. If you have questions of policy, and/or procedure relative to Custom Blended Oils Inc. we would appreciate it if you would contact Mr. Winkle directly.

The additional information you requested, i.e. analysis of tank-bottoms, mixed with lime and sent to Land and Lakes landfill, may be obtained by contacting Mr. Ron Winkle of Custom Blended Oils Inc. The other point, that of "used carburetor cleaner" can best be answered by Mr. Ernie Winkle of Custom Blended Oils Inc.

CC: Mr. John L. Parker  
Attorney  
Mr. Ernest Winkle  
File

Respectfully,

  
Bill Petrich  
environmental services...

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

## RESULTS OF OIL ANALYSIS: E. & L. Tank Cleaners

Sample Submitted: 7/16/86

Results Reported: 7/23/86

PARAMETER	ILL. REC.	ATLAS	SWO	ILL. REC.	R. & S.	HOUSE
Chlorine %		0.05	0.05	0.05	0.05	0.05
Flashpoint, P.M.		200 F.	160 F.	150 F.	140 F.	183 F.
ARSENIC		0.33	0.16	0.51	0.35	0.07 ppm
CADMIUM		1.19	1.59	1.96	1.00	1.34 ppm
CHROMIUM		2.31	1.58	1.79	1.79	1.26 ppm
LEAD	77.80	302*	307*	335*	175*	183*

\* Exceeds current standard for "Used Oil".

It is our recommendation that the oils that show excessive lead concentration, be down-blended with other oils containing lower levels to achieve compliance with current regulations for "Used Oil".

Thank you for this business.

Respectfully,

*Mike Petrich*

Mike Petrich  
I.S.S.

*July 1986*  
*through*

*December*  
*1986*

SAMPLE SOURCE: South West Oil

Sample NO. 62

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87


PARAMETER;	RESULT;	SPEC;
Flash Point:	200 F	140 F
% Chlorides:	0.36 %	4,000 ppm
Arsenic:	.04 ppm	5.0 ppm
Cadmium:	1.58 ppm	2.0 ppm
Chromium (total):	2.90 ppm	10.0 ppm
Lead:	276.0 ppm *	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This oil shows excessive lead concentrations and needs to be blended to meet the specifications set out for "Used Oil".

Independent Sampling and Services;

BY:  Bill Petrich

SAMPLE SOURCE: South West Oil

Sample NO. 62

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87

PARAMETER;	RESULT;	SPEC;
Flash Point: 200 F	140 F	140 F.
% Chlorides:		4,000 ppm
Arsenic:		5 ppm
Cadmium:		2 ppm
Chromium (total):		10 ppm
Lead:		100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This oil shows excessive lead concentrations and needs to be down-blended to meet the specifications set out for "Used Oil".

Independent Sampling and Services;

BY:  Bill Petrich

ADDITIONAL ANALYSES: Viscosity SUS @ 100 F. \_\_\_\_\_ seconds. Sulfur \_\_\_\_\_

B.T.U. \_\_\_\_\_ Ash \_\_\_\_\_ B.S.&W. \_\_\_\_\_ Gravity \_\_\_\_\_

SAMPLE SOURCE: R. & S. Waste Oil      Sample No. 61

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87

PARAMETER;	RESULT;	SPEC;
Flash Point: 200 F.	140 F.	140 F.
% Chlorides:		4,000 ppm
Arsenic:		5 ppm
Cadmium:		2 ppm
Chromium (total):		10 ppm
Lead:		100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This material shows excessive lead concentrations, and should be do blended for use in industrial boiler applications only.

Independent Sampling and Services;

  
BY: Bill Petrich

ADDITIONAL ANALYSES: Viscosity SUS @ 100 F. \_\_\_\_\_ seconds. Sulfur \_\_\_\_\_

B.T.U. \_\_\_\_\_ Ash \_\_\_\_\_ B.S.&W. \_\_\_\_\_ Gravity \_\_\_\_\_

SAMPLE SOURCE: R. & S. Waste Oil      Sample No. 61

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87


PARAMETER;	RESULT;	SPEC;
Flash Point:	200 F.	140 F.
% Chlorides:	.05 %	4,000 ppm
Arsenic:	.04 ppm	5 ppm
Cadmium:	1.96 ppm	2.0 ppm
Chromium (total):	3.55 ppm	10 ppm
Lead:	301 ppm	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This material shows excessive lead concentrations, and should be down blended for use in industrial boiler applications only.

Independent Sampling and Services;

  
BY: Bill Petrich

SAMPLE SOURCE: Illinois Recovery Co.

Sample No. 63

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87


PARAMETER;	RESULT;	SPEC;
Flash Point:	200 F.	140 F.
% Chlorides:	.05 %	4,000 ppm
Arsenic:	.04 ppm	5.0 ppm
Cadmium:	1.78 ppm	2.0 ppm
Chromium (total):	3.26 ppm	10.0 ppm
Lead:	288 ppm *	100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This oil shows excessive amounts of lead concentration and should be down-blended with other low lead fuels to an acceptable level.

Independent Sampling and Services;

BY:   
Bill Petrich



SAMPLE SOURCE: Illinois Recovery Co. Sample No. 63

SAMPLE SUBMITTED: 12/5/86

RESULTS SUBMITTED: 1/8/87


PARAMETER;	RESULT;	SPEC;
Flash Point: 200 F.	140 F.	140 F.
% Chlorides:		4,000 ppm
Arsenic:		5 ppm
Cadmium:		2 ppm
Chromium (total):		10 ppm
Lead:		100 ppm

\*Exceeds current standard for "Used Oil":

DATA RESULTS ARE IN PARTS PER MILLION UNLESS OTHERWISE INDICATED;

COMMENTS: This oil shows excessive amounts of lead concentration and should be down-blended with other low lead fuels to an acceptable level.

Independent Sampling and Services;

BY:  Bill Petrich

ADDITIONAL ANALYSES: Viscosity SUS @ 100 F. \_\_\_\_\_ seconds. Sulfur \_\_\_\_\_

B.T.U. \_\_\_\_\_ Ash \_\_\_\_\_ B.S. & W. \_\_\_\_\_ Gravity \_\_\_\_\_

SAFETY VALVE CO., INC.

P. O. BOX 100  
ARGO, ILLINOIS 60501  
812-582-4714

LABORATORY ANALYSIS REPORT

OFFICE ARGO

CUSTOMER REF. NO.:

DATE: 12-18-86

VESSEL/TANK(S): S/T 42-1

LABORATORY NO.: 2899

INVOICE NO.: (ID) 7527

DESCRIPTION

Sample designated as:  
#6 Fuel Oil

Identifying Marks:  
S/T 42-1 composite

Submitted by:  
E. W. Saybolt & Co., Inc.

Client:  
Allied Oil Co.

NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of E. W. Saybolt & Co., Inc.
- Results were based on analysis made of the time samples were received at the laboratory.
- Samples, if any, shall be retained for a period of 45 days unless a longer period is requested in writing.
- Sample nomenclature is designated by the customer.

ANALYSIS

Gravity API @ 60°F ASTM D-287  
Sulphur % WT. ASTM D-1552  
Flash PM ASTM D-93  
S & W % ASTM D-1796  
Vis, (SFS @ 122°F) ASTM D-88  
Pour Point ASTM D-97

12.0°F  
.94%  
198°F  
.5%  
113.7  
500

MEMBERS ASTM API SAE

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: House stock

DATE 11/17/86

SAMPLE SUBMITTED: 11/2/86

RESULTS REPORTED: 11/15/86

PARAMETER	RESULT	SPEC.
Flash Point	200°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	.04	5 ppm
CADMIUM	1.05	2 ppm
CHROMIUM (total)	1.31	10 ppm
LEAD	145	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: House Stock

DATE 10/22/86

SAMPLE SUBMITTED: 10/17/86

RESULTS REPORTED: 10/22/86

PARAMETER	RESULT	SPEC.
Flash Point	158°	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.24	2 ppm
CHROMIUM (total)	3.11	10 ppm
LEAD	171.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: House Stock

DATE 9/22/86

SAMPLE SUBMITTED: 9/17/86

RESULTS REPORTED: 9/22/86

PARAMETER	RESULT	SPEC.
Flash Point	200° F	140 F. or Greater
% Chlorine	0.05	4,000 ppm
ARSENIC	0.04	5 ppm
CADMIUM	1.71	2 ppm
CHROMIUM (total)	3.69	10 ppm
LEAD	96.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

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Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS:

DATE 9/2/86

House stock

SAMPLE SUBMITTED: 8/15/86

RESULTS REPORTED: 8/27/86

PARAMETER	RESULT	SPEC.
Flash Point	Greater than 200° F	140 F. or Greater
% Chlorine	Less than 0.05	4,000 ppm
ARSENIC	Less than 0.001	5 ppm
CADMIUM	0.70	2 ppm
CHROMIUM (total)	0.93	10 ppm
LEAD	173.0	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHERWISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Mike Petrich

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: B & D Oil

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	183 F.	140 F. or Greater
% Chlorine	<0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	0.265	2 ppm
CHROMIUM (total)	0.040	10 ppm
LEAD	8.39	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By

*Bill Stur*

*March 1988  
through  
December  
1988*

# INDEPENDENT SAMPLING AND SERVICES

P.O. BOX 822, 1551 WEST 187TH STREET, HOMEWOOD, ILLINOIS 60430 (312) 798-6383

RESULTS OF ANALYSIS: ILL Recovery

DATE 3-8-88

SAMPLE SUBMITTED: 2-23-88

RESULTS REPORTED: 3-8-88

PARAMETER	RESULT	SPEC.
Flash Point	148 F.	140 F. or Greater
% Chlorine	< 0.05	4,000 ppm
ARSENIC	0.5	5 ppm
CADMIUM	0.750	2 ppm
CHROMIUM (total)	0.42	10 ppm
LEAD	67.8	100 ppm

\* Exceeds current standard for "Used Oil"

DATA RESULTS IN PARTS PER MILLION UNLESS OTHER WISE INDICATED.

COMMENTS:

Independent Sampling and Services:

By Bee Stur